
Economic Sustainability Plan for the Sacramento-San Joaquin Delta Recreation and Tourism Chapter 2020 Update

Prepared for:

Delta Protection Commission

PUBLIC DRAFT REVISION 11/03/20

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Executive Summary

Purpose

This update to the Recreation and Tourism Chapter of the *Economic Sustainability Plan for the Sacramento-San Joaquin Delta* (ESP) has two main purposes. First, it responds to the Legislative directive of the 2009 amendments to the Delta Protection Act of 1992, whereby the Delta Protection Commission (Commission) is to complete an economic sustainability plan, updated every five years, with the following guideline:

The economic sustainability plan shall include information and recommendations that inform the Delta Stewardship Council's policies regarding the socioeconomic sustainability of the Delta region.

In addition, it offers the Commission, as well as local, state, and other decision makers, the best available current data and analyses of visitation, economic activity, facility and access issues, and emerging trends of recreation and tourism in the Delta. As recreation and tourism represents the second highest economic sector in the Delta, this update will help policy makers effectively respond to the key issues and trends influencing its economic sustainability.

This Executive Summary includes the following topics:

- Milestone Accomplishments from 2012 ESP
- Recreation Trends
- Key Data
- Constraints to Recreation
- Focus Group Findings
- Recommendations

Milestone Accomplishments from 2012 ESP

The Commission has advanced a number of important milestones from the 2012 ESP recommendations related to the sustainability of recreation and tourism, notably:

- Delta National Heritage Area designation
- Delta Marketing Task Force, including development of VisitCADelta.com website and Delta signage and brand
- Great Delta Trail planning
- Updated studies and surveys, including 2015 Inventory of Recreation Facilities, 2017 Recreational Boating Use, 2019 Delta Recreation and Tourism Survey Report, and 2019 Socioeconomic Indicators Report

Recreation Trends

During the past thirty years, outdoor recreation patterns have undergone some significant change, both in California and nationwide. Long-term trends in participation rates in most popular Delta outdoor recreation categories declined significantly since the 1990's and have

appeared to have leveled off. According to USFWS, nationally, the fishing participation rate has declined 50% since 1991, while hunting has declined 55% and away-from-home wildlife watching down 50%. There are no equivalent studies of Delta specific participation rates, but based on Delta specific trends in boating, it is assumed that participation is also down in the Delta. Since 2000, boating vessel registrations are also down by 24% within the Delta's Market Area. State Parks reports that Activity Days for common Delta recreation activities are also down since 1995.

During the COVID-19 pandemic, it seems a reversal has occurred, with increases in close-to-home outdoor recreation, including boating, fishing, camping, and walking in parks and natural spaces. There is no certainty as to whether this rediscovery of outdoor recreation will continue.

Key Data

The following key data characterize the status of Delta recreation at the start of 2020.

- The number of marinas in the Delta has decreased since 2008, from 112 to 97 in 2020. Likewise, there has been a decline in recreation-related establishments located in the primary zone, from 96 in 2008 to 70 in 2020. The number of boat builders in the Delta has dropped by 50%, along with drops in most other boating-related businesses.
- The number of farms with direct sale operations, such as farm stands or you-pick operations, agritourism or recreation sales, have increased in the six Delta Counties since 2002, with resultant increases in income per farm. In addition, many wineries and wine-tasting establishments have opened.
- Since 2012, the population in the market area is estimated to have increased by approximately 1,200,000 or 10%.
- Recreation visitation for 2020 was updated with recent data, but is estimated to be similar to 2010 estimates; approximately 8 million *resource-related* (e.g., boating and fishing) visitor days of use per year, 2 million *urban parks-related* (e.g., golf, picnic, and turf sports), and 2 million *right-of-way-related* (e.g., bicycling and driving for pleasure) recreation visitors per year.
- Since no direct surveys exist, the total number of activity days was estimated based on best available data and professional judgment at approximately 12 million/year, similar to 2010. The increased market area population referred to above offset declining participation rates.
- Current direct spending in the Delta region from *resource-related* and *right-of-way/tourism-related* trips and related non-trip spending is estimated at roughly \$250 million inside the Delta (in 2020 dollars), as compared to approximately \$312 million in 2012, a decline of almost 20 percent¹. Most spending occurs within Legacy Communities and at marinas.

¹ The analysis states impact estimates in nominal dollars. The decline in spending between 2012 and 2020 in inflation-adjusted dollars is nearly 30 percent.

- Delta recreation and tourism now supports almost 2,300 jobs in the five Delta counties, compared to approximately 3,000 jobs in 2012 (a 26% decrease). These jobs provide about \$98 million in labor income, and a total of \$144 million in value-added to the regional economy. These numbers are lower than the estimates from 2012 when Delta jobs provided about \$104 million in labor income and \$175 million in value-added.
- Delta recreation and tourism supports about 3,800 jobs across all of California, a decline of 28% of the estimated 5,300 statewide jobs in 2012. The sector contributes about \$280 million in value added, compared to approximately \$350 million in 2012, a decline of 20%.
- The main reasons for the decreases in spending are twofold: 1) the estimate of average daily spending decreased due to more precise data, and 2) most recreation spending currently is retail related, lowering the economic impact multiplier. A higher level of spending on boats built in the Delta, for example, would increase the economic impact.
- Table ES-1 at the end of this summary lists selected key economic data comparisons between this update and the 2012 ESP. Note that most of the key data points have declined in that time period, in spite of increases in population.

While advances in the Delta Trail, Delta National Heritage Area, and marketing programs are important, they do not address actions necessary to economically support the two weaker, more financially productive portions of the Delta’s recreation and tourism economic sustainability – marinas and Legacy Communities.

Constraints to Recreation

Several physical and operational constraints and uncertainties have an impact on current facilities and recreation access. These include:

- | | |
|---|------------------------------------|
| • sediment accumulation | • no single management entity |
| • invasive species | • burdensome regulations |
| • waterway obstructions | • homelessness and crime |
| • water quality | • aging infrastructure |
| • lack of boat-in destinations | • rising sea levels/climate change |
| • highly sensitive habitat areas with public use restrictions | • water conveyance |
| • user group conflicts | • lack of public access facilities |
| • trespassing | • traffic congestion |
| | • and others |

Most of these constraints are chronic and were reported in the 2012 ESP (as well as many other studies), while some have become more problematic recently, such as homelessness, invasive aquatic weeds, traffic congestion, and water conveyance plans.

Focus Group Findings

Five focus groups were conducted for this update in order to help deepen understanding about current issues and provide additional qualitative data. The focus groups were all conducted via phone and web-based participation from February through April 2020 and represented a cross section of the Delta recreation and tourism sector, including marina owners, other business

owners, activity participants, and underserved communities. Focus groups echoed many of the same issues identified above, including water quality, abandoned vessels, infrastructure, and limited public facilities and trails. In spite of these issues, business and marina owners were cautiously optimistic about the future, and users felt the Delta was a hidden gem, with easy access to natural areas, and suggested that visitation can be increased without changing its character. The ideas they offered to improve visitation, in addition to addressing negative issues, included increasing business networking, marketing, and programming, developing youth ambassador programs, and adding new businesses and public access facilities.

Recommendations

This update to the ESP first reviewed recommendations from prior studies and resultant actions, and then refocused recommendations to solve problems in the areas that most strongly impact the economy, namely marinas, boating, and Legacy Community-related outdoor recreation and tourism businesses. The key desired outcome is to restore and sustain the second pillar of the Delta economy: recreation and tourism.

- Prior recommendations from twelve other plans/studies prepared for multiple agencies since 2002 covered the following broad topic areas
 - Facilities: Increase operations and maintenance of existing areas
 - Facilities: Expand and develop new public facilities and support existing private businesses
 - Water Quality Needs, Enhancement, and Protection
 - Information/Marketing
 - Programming
 - Boating Safety
 - Crime and Homelessness
- The same recommendations have been repeated in multiple studies, with no meaningful progress on the majority of more than 40 recommendations over the past 20 years. Reasons for lack of implementation are many and include lack of funding, complexity, and lack of a primary responsible entity.
- In order to overcome these obstacles and improve the recreation economy, the key high priority issues we recommend for immediate action and focus include:
 - Partner with local and regional park and economic development agencies and State Parks to expand access to existing public facilities
 - Partner with USACE to restart the Delta Dredged Sediment Long Term Management Plan
 - Develop permitting and planning assistance for Legacy Community small businesses
 - Partner with local agencies and State Parks-Division of Boating and Waterways (DBW) to expand funding to remove water hazards and abandoned vessels, and improve local boating and water access facilities
 - Expand “Save the Waters You Love” campaign from the Bay to the Delta
 - Partner with the Delta Conservancy, DBW, and counties to increase law enforcement funding and presence in the Delta

- Expand the Delta Marketing Task Force efforts and promotion of VisitCADelta.com
- Prioritize planning and implementation of Great Delta Trail and Delta National Heritage Area
- Institute regular ongoing surveys of Delta recreation and tourism
- A responsible agency or a facilitator organization should be identified or created that could coordinate community priorities in the Delta and then take action, solving major problems related to recreation, tourism, and economic development of the Legacy Communities.
- The Delta Plan recommends the Commission and Conservancy should take steps to encourage partnerships to expand recreation and promote tourism. This effort should be re-doubled with outreach to engage state and local government and willing non-profits to investigate the need and desire for a facilitator organization.
- Funding may be provided through pooled resources, the State budget process, the Delta National Heritage Area, local budgets, bonds, grant funds, federal budget, or through the Delta Conveyance Authority/DWR.
- Table ES-2 at the end of this summary highlights recommendations and sponsor or partner agencies.

Table ES - 1 Selected Key Data Type Comparisons from 2012ESP to 2020 Update

Data Type	2012 ESP	Current Update	Percent Change
Market Area Population	11,900,000	13,100,000	+10.1%
Recreation Related Establishments – Primary Zone	96	70	(-27.0%)
Recreation Related Establishments – Secondary Zone	1,460	2,418	+65.6%
Marinas	112	97	(-13.4%)
Boat Builders	16	8	(-50.0%)
Boat Dealers	35	35	0
Boat Repair	49	36	(-26.5%)
DMV Registered Vessels (Market Area)	306,998	270,713	(-11.8%)
Fishing Licenses Statewide (2009 v. 2019)	1,179,195	1,007,428	(-14.6%)
Hunting Licenses Statewide (2009 v. 2019)	1,679,864	2,040,946	+21.5%
Estimated Direct Delta Recreation Spending	\$312,140,244	\$251,901,000	(-19.3%)

Data Type	2012 ESP	Current Update	Percent Change
Total Economic Impact on Five Delta Counties	\$329,229,232	\$236,284,000	(-28.2%)
Total Economic Impact Statewide	\$654,415,364	\$446,082,000	(-32.8%)
Recreation Employment in Delta Counties	3,064	2,280	(-25.6%)
Recreation Employment Statewide	5,317	3,780	(-28.9%)

Table ES-2 Sponsor Agencies and Potential Partners for each Recommendation

Recommendation	Sponsor Agency	Partners
Establish Facilitator Organization	Commission	Council/Conservancy
Prioritize planning and implementation of Great Delta Trail and Delta National Heritage Area	Commission	Facilitator Organization, Conservancy
Institute ongoing surveys of Delta recreation and tourism	Commission/Council	Facilitator Organization, Conservancy, DWR
Expand Delta Marketing Task Force and promotion of VisitCADelta.com	Commission/Conservancy	Facilitator Organization, Conservancy
Maintain and upgrade existing public facilities	Facilitator Organization or Commission	State Parks, local/regional park providers
Expand "Save the Waters You Love" campaign from Bay to Delta	Facilitator Organization or Commission	Conservancy, San Francisco Estuary Project
Implement permitting and planning assistance for Legacy Communities	Facilitator Organization or Commission	Conservancy and local agencies
Expand recreation facilities	Facilitator Organization	State Parks, Local Agencies, DBW
Restart Delta Dredged Sediment Long Term Mgt Plan, strengthen levees, simplify permitting	USACE	Reclamation Districts, CVFPB, Facilitator Organization
Expand funding to remove water hazards and abandoned vessels	DBW	Commission or Facilitator Organization, Conservancy, local agencies
Increase law enforcement funding and presence	DBW/Local law enforcement agencies	Commission or Facilitator Organization

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Note

The research team prepared this Report as the nation and world seek to address the coronavirus disease (COVID-19) pandemic, an unprecedented public health crisis. Research was substantially completed before the severity of the crisis became apparent. In late March and early April 2020, the economic fallout from the COVID-19 pandemic was both significant and abrupt. Anecdotally, some localized outdoor recreation, such as boating and fishing, has been positively impacted by the pandemic, with travel and leisure options severely curtailed due to health risks. The length and severity of the COVID-19 pandemic are still unknown, and its economic implications will depend fundamentally on how the crisis unfolds. The current consensus is that negative economic impacts are likely to dissipate gradually, although the exact pace and timeframe for economic recovery remain unclear. Given the unpredictability, the potential implications of the COVID-19 pandemic for recreation and related economic activity in the Delta are not considered in depth in this Chapter of the ESP.

Chapter 8: Recreation and Tourism Update

8.1 Overview and Key Findings

- The Sacramento-San Joaquin Delta supports a diversity of recreation experiences, ranging from boating in open water or through winding tree-covered channels, to hunting, wildlife viewing, biking or driving winding levee roads, studying local California history, or tasting award-winning local wines and locally grown produce.
- Recreation is integral to the Delta, complementing its multiple resources and contributing to the economic vitality of the region. Residents and visitors recreate in the Delta every day, generating a total of roughly 12 million visitor days of use annually and a direct economic impact of more than two hundred million dollars in spending per year.
- Recommendations from the 2012 ESP that have been started or accomplished by the Commission and others include designating the Delta National Heritage Area and initiating the management plan development, planning for the Great Delta Trail and designating some segments, marketing, planning, creating and supporting the visitCADelta.com website, and completing plans, studies and surveys, many in support of this update.
- Over the past 30 or more years, federal, state, regional, and local parks departments' budgets have been shrinking while costs have been increasing. The public spaces in the Delta have also seen the impacts of this reduced funding as parks have been closed or partially closed (Delta Meadows and Windy Cove²), turned over to an outside concessionaire (Brannan Island), vandalized (DFW wildlife areas and others) or simply seen less maintenance or staff (Franks Track and others).
- The number of marinas in the Delta has decreased since 2008, from 112 to 97 in 2020. Likewise, there has been a decline in recreation-related establishments located in the primary zone, from 96 in 2008 to 70 in 2020. The number of boat builders in the Delta has dropped by 50%, along with drops in most other boating related businesses.
- The number of farms with direct sale operations, such as farm stands or you-pick operations, agritourism or recreation sales, have increased in the six Delta Counties since 2002, with resultant increases in income per farm. In addition, many wineries and wine-tasting establishments have opened.
- Several physical and operational constraints have an impact on current facilities and recreation access. These include sediment accumulation, invasive aquatic vegetation, waterway obstructions, water quality, lack of boat-in destinations, highly sensitive habitat areas, user group conflicts, no single management entity, regulations, homelessness and crime, and other issues.

² Though closed for a number of years after the 2008 to 2009 recession, it was re-opened again by State Parks a few years ago.

- Focus groups conducted for this update echoed many of the same issues identified above but also called the Delta a hidden gem, with easy access to natural areas, and suggested that visitation can be increased without changing its character. The ideas they offered to improve visitation, beyond addressing current issues, included increasing business networking, marketing, and programming, developing youth ambassador programs, and adding new businesses and public access facilities.
- The majority of visitors are from Northern California and form the focal market for Delta recreation growth opportunities in the future. The total Market Area had a population estimate of approximately 13.1 million in 2020, with projections to grow to 16 million by 2060. Since 2012, the population in the market area is estimated to have increased by approximately 1,200,000 or 10%.
- Recreation visitation for 2020 was updated with recent data, but is estimated to be similar to 2010 estimates; approximately 8 million *resource-related* (e.g., boating and fishing) visitor days of use per year, 2 million *urban parks-related* (e.g., golf, picnic, and turf sports), and 2 million *right-of-way-related* (e.g., bicycling and driving for pleasure) recreation visitors per year.
- Since no direct surveys exist, the total number of activity days was estimated based on best available data and professional judgment at approximately 12 million/year, similar to 2010.³ The increased market area population offset declining participation rates.
- Current direct spending in the Delta region from *resource-related* and *right-of-way/tourism-related* trips and related non-trip spending is estimated at roughly \$250 million inside the Delta (in 2020 dollars), as compared to approximately \$312 million in 2012, a decline of almost 20 percent⁴. Most spending occurs within Legacy Communities and at marinas.
- Delta recreation and tourism now supports almost 2,300 jobs in the five Delta counties, compared to approximately 3,000 jobs in 2012 (a 26% decrease). These jobs provide about \$98 million in labor income, and a total of \$144 million in value added to the regional economy. These numbers are lower than the estimates from 2012 when Delta jobs provided about \$104 million in labor income and \$175 million in value added.
- Delta recreation and tourism supports about 3,800 jobs across all of California, a decline of 28% of the estimated 5,300 statewide jobs in 2012. The sector contributes about \$280 million in value added, compared to approximately \$350 million in 2012, a decline of 20%.
- The main reasons for the decreases in spending are twofold: 1) the estimate of average daily spending decreased due to more precise data, and 2) most recreation spending currently is retail related, lowering the economic impact multiplier. A higher level of spending on boats built in the Delta, for example, would increase the economic impact.

³ Estimates are based on limited available updated data combined with professional judgment.

⁴ The analysis states impact estimates in nominal dollars. The decline in spending between 2012 and 2020 in inflation-adjusted dollars is nearly 30 percent.

- The principal changes and trends that could affect the present recreation use and demand over the next 10-50 years are decreasing participation in fishing, boating, and hunting, decreasing boating registrations, physical changes to the Delta due to water conveyance management changes and rising sea levels, and ongoing decline of both public and private recreation facilities. Positive trends include increasing population and development growth and increasing agritourism and wineries.
- Forecasted visitation shows baseline increases of 1.9 million visitor days, or about 18 percent, over 40 years (excluding urban parks visitation). If the recommendations in this update are implemented, all recreation and tourism visitation in the Delta could increase over baseline.
- Key opportunities and influences that will shape the future of the Delta as an evolving place include changing population demographics, changing access to public lands, market area development, agriculture and recreation trends, water conveyance, and climate change.
- While advances in the Delta Trail, Delta National Heritage Area, and marketing programs are important, they do not address actions necessary to economically support the two weaker, more financially productive portions of the Delta's recreation and tourism economic sustainability – marinas and Legacy Communities.
- Prior recommendations from twelve other plans/studies prepared for multiple agencies since 2002 covered the following broad topic areas
 - Facilities: Increase operations and maintenance of existing areas
 - Facilities: Expand and develop new public facilities and support existing private businesses
 - Water Quality Needs, Enhancement, and Protection
 - Information/Marketing
 - Programming
 - Boating Safety
 - Crime and Homelessness
- The same recommendations have been repeated in multiple studies, with no meaningful progress on the majority of more than 40 recommendations over the past 20 years. Reasons for lack of implementation are many and include lack of funding, complexity, and lack of a primary responsible entity.
- In order to overcome these obstacles and improve the recreation economy, the key high priority issues we recommend for immediate action and focus include:
 - Partner with local and regional park and economic development agencies and State Parks to expand access to existing public facilities
 - Partner with USACE to restart the Delta Dredged Sediment Long Term Management Plan
 - Develop permitting and planning assistance for Legacy Community small businesses
 - Partner with local agencies and State Parks-Division of Boating and Waterways (DBW) to expand funding to remove water hazards and abandoned vessels, and improve local boating and water access facilities

- Expand “Save the Waters You Love” campaign from the Bay to the Delta
- Partner with the Delta Conservancy, DBW, and counties to increase law enforcement funding and presence in the Delta
- Expand the Delta Marketing Task Force efforts and promotion of VisitCADelta.com
- Prioritize planning and implementation of Great Delta Trail and Delta National Heritage Area
- Institute regular ongoing surveys of Delta recreation and tourism
- A responsible agency or a facilitator organization should be identified or created that could coordinate community priorities in the Delta and then take action, solving major problems related to recreation, tourism, and economic development of the Legacy Communities.
- The Delta Plan recommends the Commission and Conservancy should take steps to encourage partnerships to expand recreation and promote tourism. This effort should be re-doubled with outreach to engage state and local government and willing non-profits to investigate the need and desire for a facilitator organization.
- Funding may be provided through pooled resources, the State budget process, the Delta National Heritage Area, local budgets, bonds, grant funds, federal budget, or through the Delta Conveyance Authority/DWR.
- Several different entities are suggested that could logically implement various aspects of this ESP update, including a designated facilitator organization: the Delta Protection Commission (Commission), the Sacramento-San Joaquin Delta Conservancy (Conservancy), Delta Stewardship Council (Council), California Department of Parks and Recreation (CA State Parks) and its Division of Boating and Waterways (DBW), California Department of Water Resources (DWR), U.S. Army Corps of Engineers (USACE), Central Valley Flood Protection Board (CVFPB), Reclamation Districts (RDs) and Levee Management Agencies (LMAs), and Delta cities and counties.

8.2 Introduction

8.2.1 Introduction and Purpose

This update to the Recreation and Tourism Chapter of the *Economic Sustainability Plan for the Sacramento-San Joaquin Delta* (ESP) has two main purposes. First, it responds to the Legislative directive of the 2009 amendments to the Delta Protection Act of 1992, whereby the Delta Protection Commission (Commission) is to complete an economic sustainability plan, updated every five years, with the following guideline:

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In addition, it offers the Commission, as well as local, state, and other decision makers, the best available current data and analyses of visitation, economic activity, facility and access issues, and emerging trends of recreation and tourism in the Delta. As recreation and tourism represents the second highest economic sector in the Delta, this update will help policy makers effectively respond to the key issues and trends influencing its economic sustainability.

Data and findings in this report can inform and shape policy decisions that affect Delta recreation and its economic impacts. A current understanding of the perspective of both recreationists and recreation providers - most of which are small private businesses – is needed to analyze and interpret recreation and tourism trends and economic data. This update aims to provide that understanding.

The future of the Delta is ever fluid. The Newsom administration directed DWR to withdraw proposed permits for the CA WaterFix and to re-direct planning efforts to modernize water conveyance through the Delta with a new single tunnel project known as the Delta Conveyance Project. Planning is underway to restore part of Franks Tract to tidal wetlands with companion recreation improvement elements. Recreation and tourism trends are changing as baby boomers slow down and the millennial generation develops spending power and new patterns of recreation. In the context of these shifting consumer preferences, the ESP must provide a forward-looking perspective with recommendations that seek to sustain and enhance the Delta recreation and tourism economy while being faithful to the history and current status of recreation and tourism contributions to the Delta as an evolving place⁵.

The 2012 ESP included a number of recommendations promoting sustainable recreation and tourism in the Delta. They included:

- Designate a regional agency to implement and facilitate economic development efforts
- Protect and enhance private enterprise-based recreation with support from state and local public agencies

⁵ “Delta as an evolving place” encompasses the unique cultural, recreational, agricultural and natural resource values that makes the Delta a special region. For more information see <https://viewperformance.deltacouncil.ca.gov/chapter/delta-evolving-place>

- Focus recreation development toward five location-based concepts
- Implement through regulation refinement, agency coordination, levee protection for Legacy Communities, and provide additional funding for catalyst projects

In addition, the 2012 ESP identified several gaps in recreation and tourism data, including:

- An up-to-date visitor survey with new primary data, particularly on non-boating and non-fishing recreation, is needed to better document existing recreation visitation and spending.
- There have been no recent comprehensive visitor surveys within the Delta focused on Delta recreationists' activities and spending patterns. This lack of primary data hampers planning and marketing efforts.

However, the Delta is a very porous recreation area with multiple access points on both land and water. Since accurate counts of all people who recreate or tour the Delta on an annual basis would require significant funding augmentation and most likely require a multi-agency effort, it was found that conducting such surveys were cost prohibitive and impractical. Therefore, this study and others have to rely on estimates at this time.

Multiple sources of information were used in the 2012 ESP, including from the federal government, the State of California, and local and private sources. Some of these sources have been updated since 2012, such as California State Parks *Survey on Public Opinions and Attitudes on Outdoor Recreation in California*, while others have not, such as the *National Recreation Survey*, which was started in 1960 and last updated in 2010. In addition, several new planning documents and surveys have been produced that are relevant to Delta recreation and tourism.

This update process first reviewed and synthesized recent recreation and tourism studies. Using that information, focus groups were conducted to help fill some of the gaps of knowledge that existed. These groups helped clarify and update some data understandings and analysis, though data gaps still exist.

This updated report chapter includes analyses related to the information sources available as of June 2020 and makes forward looking recommendations based on those sources and the trends predicted from them. However, with the advent of the COVID-19 coronavirus pandemic, many businesses have been closed for lengthy periods, and Californians have been subjected to shelter-in-place and travel restrictions. Future predictions cannot fully take into account all of the long-term effects this pandemic has created within the economy, especially since the economic sector studied in this report – recreation and tourism – is generally not determined to be essential and has suffered greatly thus far. However, at the same time, the desire and demand for outdoor resources-based activities seems to be increasing. The Governor's order to shelter at home went into effect on March 19, 2020, effectively closing all but essential businesses, was loosened and then subsequently re-implemented on July 13, 2020, and loosened again county by county at the time of this report. This report presents a "snapshot" in time that represents the Delta recreation and tourism economy prior to the pandemic.

This updated chapter follows the format and analytic approach of the 2012 ESP. First, background data and information is presented. These data are used, in part, to model visitation and current economic impacts of recreation and tourism in the Delta. This information is used

to answer the question of whether the recreation and tourism economy is stable and/or sustainable. This information will also be compared to 2012 data in order to help determine trends and changes. The second part of the report synthesizes the data into potential strategies for economic sustainability. The final part presents recommendations for implementation.

This updated chapter is intended to replace a part of the full 2012 ESP and will refer to various other chapters in that document for points of reference, data, and clarification.

8.2.2 Introduction to the Delta

The Sacramento-San Joaquin Delta is a significant and unique natural and cultural heritage region in California—a mosaic of meandering rivers, sloughs, back bays, shipping channels, small communities, historic sites, and agricultural islands with farm markets and wineries. It is a vast area, covering almost 750,000 acres, with about 60 larger tracts and islands and over 650 linear miles of waterways and channels.

The Delta links California's Central Valley with the San Francisco Bay. It is surrounded by cities and urbanizing areas at the edge of the Delta, and bisected by two primary rivers, the Sacramento and the San Joaquin.

The region's rich history boasts of bustling river-based commerce before the automobile age, and its cultural uniqueness includes the only town in America built and settled by early Chinese immigrants.

Approximately 13 million people live within close proximity of the Delta, yet many are unaware of its role as a vital water hub, a rich biological resource, and an important agricultural production area for the entire state. For most, the defining feature of the Delta is the multitude of recreation opportunities found there.

The Delta gives visitors a place to slow down and relax, to taste earth's bounty, and to leave the urban areas behind. It is called California's boating paradise and is one of the State's most important fishing and waterfowl hunting resources, a place with natural habitats for bird watching and nature study, and a scenic place to meander and explore by boat or car.

The Delta is a wonderfully diverse recreation resource, attracting a wide variety of users. It is unique in that the great majority visits privately owned establishments such as marinas, wineries, or restaurants, but largely recreate on public waterways.

Recreation is an integral part of the Delta, complementing its multiple resources and contributing to the economic vitality and livability of the region.

8.2.3 Delta Regulatory Structure

As the largest estuary on the west coast of the Americas, the Delta is a place of striking natural beauty and ecological significance, a highly productive agricultural area and a critical piece of California's massive water delivery systems. In the 1970s and 1980s the burgeoning populations of the San Francisco Bay and Sacramento metropolitan areas saw rapid residential development and increasing conversion of agricultural lands with significant development encroaching on the lands of the Delta. The Delta Protection Act of 1992 was enacted to ensure the conservation and enhancement of the Delta's natural resources while sustaining agriculture and meeting

increased recreational demand. The Act created the Delta Protection Commission, divided the Legal Delta into a primary and a secondary zone, and gave the Commission land use authority over development subject to approval by local agencies in the primary zone, but not over state or federal actions.

In the ensuing decades, concerns over ongoing environmental degradation, particularly increasingly threatened fish populations and other natural resources, water quality and reliability concerns, and apprehensions about long-term stability of the Delta's levee system led, in 2009, to the enactment of the Delta Reform Act (DRA) and amendments to the Delta Protection Act of 1992 by the California legislature.

The DRA created the Council and charged it with developing a "Delta Plan" to achieve the co-equal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta Ecosystem". The legislation also stated that the accomplishment of those coequal goals "shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

The 2009 amendments to the Delta Protection Act of 1992 also directed the Commission to complete an economic sustainability plan to help inform the Council's policies regarding the socioeconomic sustainability of the Delta and to update this plan every five years.

Chapter 4 of the 2012 ESP provides background on the complex regulatory and planning structure of the Delta, with six counties, several incorporated cities, and multiple State agencies with key roles in Delta governance. This section provides a short overview of relevant agencies and an update to some of the plans that have changed since 2012.

8.2.3.1 Delta Protection Commission

The Commission has a mission to protect, maintain, enhance, and enrich the overall quality of the Delta environment and economy. The vision for the Delta synthesizes cultural, ecological, and agricultural values in a sustainable, healthy, and celebrated way of life.

As part of its mandate, the Commission was required by Public Resources Code section 29760 et seq. to prepare, adopt, and maintain a comprehensive long-term Land Use and Resource Management Plan (LURMP) for the primary zone of the Delta. The LURMP includes a description of needs and goals, and a statement of policies for each of six elements:

1. Land Use, Agriculture
2. Natural Resources
3. Recreation & Access
4. Water
5. Levees
6. Utilities & Infrastructure.

The LURMP guides local land use in the primary zone. Goals and policies of the LURMP that support the economic sustainability of recreation and tourism in the Delta include:

- Preserving unique recreational resources

- Promoting Delta as a place
- Supporting agricultural tourism
- Encouraging compatibility between agriculture, recreation, and habitat
- Promoting ecological, recreational, and agricultural tourism to preserve the cultural values and economic vitality of the region
- Promoting continued recreational use of the land and waters of the Delta
- Ensuring appropriate planning, development, and funding for expansion and maintenance of existing recreation resources
- Encouraging expansion of existing facilities
- Assessing the need for new facilities and ensuring adequate public services associated with all existing, new, and improved facilities
- Encouraging new opportunities for water, hiking, and biking trails
- Supporting improved access for bank fishing
- Ensuring provision of appropriate sanitation and waste management facilities
- Encouraging funding for removal of navigational and environmental hazards
- Promoting Delta-wide communication, coordination, and collaboration on abatement and law enforcement activities
- Supporting Delta-wide public safety activities
- Protecting and enhancing water-quality in the Delta
- Promoting the maintenance and enhancement of roads and thoroughfares
- Encouraging the provision of infrastructure for new facilities

Commission Projects and Implementation of ESP

As guided by its mission and current Strategic Plan, the Commission conducts a number of projects and programs, many of which were recommended by the 2012 ESP. The programs that are related to the sustainability of recreation and tourism are summarized below and include:

- Delta National Heritage Area
- Great Delta Trail
- VisitCADelta.com
- Delta Marketing Task Force
- Studies and surveys

Delta National Heritage Area

The Commission is the local coordinating entity for the Sacramento-San Joaquin Delta National Heritage Area (NHA), newly designated by Congress in March 2019. An NHA is a place where natural, cultural, historical, and recreational resources combine to form a unique landscape of national significance. In the 2012 Feasibility Study for the Delta NHA, mission and vision statements were proposed as follows:

- Mission: To recognize, enhance, and promote ‘Delta as a Place’ to help cultivate and retain appreciation and understanding of the Delta as an ecological, agricultural, recreational, historical, and cultural treasure.

- Vision: A regional network of partner sites with interpretive/educational components that will be linked where possible and serve as the primary attractions, on existing public properties or on private properties with the voluntary consent and involvement of the landowners.

With the new designation, the Commission is currently working on a management plan for the NHA that will be developed with guidance from an advisory committee. The management plan must be submitted to the Secretary of the Interior by 2023.

Great Delta Trail

The Commission is coordinating planning and implementation for the Great Delta Trail, a continuous recreational corridor trail network through the Delta Counties, linking the San Francisco Bay Trail system to planned Sacramento River Trails in Yolo and Sacramento Counties. Staff is currently working on developing a Master Plan for the Great Delta Trail influenced by the Blueprint Reports previously developed.

The Commission has already adopted some trail segments including the Carquinez Strait Scenic Loop Trail, those along the Sacramento River Parkway, and within the East Bay Regional Park system and West Sacramento. Staff created a Great Delta Trail logo and signage has been installed along adopted trail segments in Sacramento and West Sacramento. The Master Plan process is underway, with public outreach expected in 2021.

Marketing

The 2012 ESP found that one constraint to increasing visitation was the lack of an overall Delta brand. Working with the Conservancy, the Commission formed a Delta Marketing Task Force composed of agency staff, representatives from businesses, visitors' bureaus, and chambers of commerce interested in marketing the Delta as a brand. The Delta Marketing Task Force produced a Delta marketing study recommending development of a Delta brand and increasing awareness of Delta tourism.

This effort resulted in development of the VisitCADelta.com website. The website focuses on "All things Delta" and aims to be the primary resource for recreation and tourism in the Delta. The website includes maps and listings of things to do, places to visit, restaurants, overnight accommodations, events, and more. It sponsors an annual "Best of the Delta" campaign that has grown in popularity every year since its inception. The website expands and improves on available Delta visitor information resources. The work of the Delta Marketing Task Force is ongoing and currently includes "Welcome to the Delta" signage.

Studies and Surveys

The Commission has completed a number of studies and updated surveys in response to the 2012 ESP recommendation to conduct visitor surveys with new primary data. These studies have included an updated inventory of recreation facilities in the Delta, development of socioeconomic indicators, and separate surveys on boating and tourism. These studies are summarized in Section 8.3.4.3.

8.2.3.2 *Delta Stewardship Council*

The Council was established by the Delta Reform Act of 2009 to develop, adapt, and implement the Delta Plan to achieve the co-equal goals of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem...in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”

The Delta Plan outlines steps that need to be taken to meet the coequal goals and includes five core strategies for protecting and enhancing the Delta as a Place:

- Designate the Delta as a special place worthy of national and state attention
- Plan to protect the Delta’s lands and communities
- Maintain Delta agriculture as a primary land use, a food source, a key economic sector, and a way of life
- Encourage recreation and tourism that allow visitors to enjoy and appreciate the Delta, and that contribute to its economy
- Sustain a vital Delta economy that includes a mix of agriculture, tourism, recreation, commercial and other industries, and vital components of state and regional infrastructure

The Delta Plan contains one policy and eleven recommendations relating to recreation and tourism.

- DP P1 Locate New Urban Development Wisely (23 CCR section 5010)
- DP R1 Designate the Delta as a National Heritage Area
- DP R2 Designate State Route 160 as a National Scenic Byway
- DP R3 Plan for the Vitality and Preservation of Legacy Communities
- DP R9 Encourage Agritourism
- DP R11 Provide New and Protect Existing Recreation Opportunities
- DP R12 Encourage Partnerships to Support Recreation and Tourism
- DP R13 Expand State Recreation Areas
- DP R14 Enhance Nature-based Recreation
- DP R15 Promote Boating Safety
- DP R16 Encourage Recreation on Public Lands
- DP R17 Enhance Opportunities for Visitor-serving Businesses

The Delta Plan identifies Performance Measures for implementation of policies and recommendations, with specific measures for Recreation Opportunities, Delta Tourism and Delta Economy.⁶ Recreation Opportunities are based solely on the implementation of State Parks Recreation Proposal, described below. Delta Tourism measures performance metrics include acreage of public lands and number of fishing licenses sold in the Delta counties.

⁶ <https://viewperformance.deltacouncil.ca.gov/chapter/delta-evolving-place>

8.2.3.3 *Sacramento-San Joaquin Delta Conservancy*

The Conservancy was also created by the Delta Reform Act as the lead state agency to implement ecosystem restoration in the Legal Delta and to support environmental protection and the economic well-being of Delta residents. The Conservancy adopted their current strategic plan in 2017.

The Conservancy has set three strategic goals that reflect its mission and priorities:

1. **Goal 1: Delta Agricultural and Economic Enhancement:** Promote multi-benefit Delta working landscapes and a robust Delta tourism economy, in collaboration with local stakeholders and the Delta Protection Commission, to enhance the unique cultural, recreational, natural resource, and agricultural values of the Delta.
2. **Goal 2: Delta Ecosystem Viability:** Fund and implement high-priority projects that increase Delta ecosystem viability through sustaining critical habitat, restoring ecological function, improving water quality, protecting listed species, increasing ecosystem diversity, and managing for climate change; and continue to work collaboratively to define multi-benefit restoration objectives.
3. **Goal 3: Conservancy Organizational Strength and Sustainability:** Cultivate a durable and effective organization via strategic collaboration, effective staffing and management, and long-term financial planning.

Through its Proposition 1 grant program to improve the Delta ecosystem, the Conservancy has funded \$35.3 million across 26 grants, benefiting more than 8,000 acres of Delta habitat.⁷ These grants are focused on ecosystem and watershed protection and restoration projects. The Conservancy also has a Proposition 68 non-competitive grant program for projects that enhance Delta communities, economy, recreation, and heritage that launched in early 2020. As of September 2020, the Conservancy has received a mix of planning and implementation concept proposals for recreation and tourism, and historic and cultural preservation.

8.2.3.4 *State Parks Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*⁸

The Delta Reform Act directed CA State Parks to prepare a proposal “to expand within the Delta the network of state recreation areas, combining existing and newly designated areas.”⁹ The resulting *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* (Proposal) discusses existing demand, resources, trends, and recommendations and outcomes. By its legislative mandate, this 2011 Proposal focuses on public sector resources and state agencies. CA State Parks introduces the concept of a Gateway-Basecamp-Adventure strategy. A Gateway is defined as a “community on the edge...providing information to visitors about recreation opportunities available in an area and equipping them with supplies for the

⁷ <http://deltaconservancy.ca.gov>

⁸ State Parks 2011

⁹ Water Code Section 85301(c)(1)

adventure.”¹⁰ A Basecamp is a “park, resort, or town...providing services, as well as facilities.”¹¹ One would depart for an “Adventure” or activity from a gateway or basecamp. Recommended links for Gateways, Basecamps, and Adventure areas would be scenic highways and biking, hiking, and boating trails. Around this strategy, the Proposal emphasizes the importance of partnerships, and recommends building a Delta brand, providing direction, diversifying activities, and minimizing costs by seizing multi-use opportunities.

The Proposal recommends improvements to existing State Parks within and along the edge of the Delta, and describes four potential future State Parks in the Delta-Suisun Marsh Region, at Barker Slough, Elkhorn Basin, Wright-Elmwood Tract, and the South Delta.¹² The Proposal also provides recommendations for other state agencies, including CDFW, DBW, Caltrans, DWR, the State Lands Commission (SLC), the Commission, the Conservancy, and the Coastal Conservancy. Other recommendations include completing the recreational trails system in the Delta.¹³

Of particular importance for the ESP, the Proposal also recommends ways to increase recreation contribution to the Delta economy:

- Promote recreation to increase spending
- Increase the variety of recreation available
- Encourage visitors to stay longer and experience additional activities
- Offer a mix of both affordable and higher cost recreation activities
- Increase spending for supplies and equipment in Gateways
- Enhance and promote scenic highways and trails

8.2.3.5 Delta Conveyance/EcoRestore

For more than 30 years, the State of California has been engaged in planning within the Delta to identify problems and possible solutions to water issues, including water quality for both human and ecological uses, and water supply for exports to the San Joaquin Valley, Southern California, and the San Francisco Bay Area. Plans have included the CALFED Record of Decision, the Delta Vision Blue Ribbon Task Force, the Bay Delta Conservation Plan (BDCP), and CA WaterFix. Currently, the State is pursuing the separate Delta Conveyance Project and EcoRestore plans for the Delta.

The Delta Conveyance Project includes plans for a single tunnel to be constructed by the Delta Conveyance Design and Construction Authority (DCA), a Joint Powers Authority (JPA) consisting of participating public water districts receiving State Water Project deliveries. Under a Joint Exercise of Powers Agreement (JEPA) with DWR, the DCA is conducting engineering design and planning for the project, while DWR prepares and coordinates environmental review. The project has a vision for water resilience through a single tunnel that is planned to ensure water supply security.

¹⁰ State Parks 2011, p. 6

¹¹ Ibid

¹² Ibid, p. 22-24

¹³ Ibid, p. 26-29

California EcoRestore is an initiative to help coordinate and advance at least 30,000 acres of critical habitat restoration in the Delta by 2020. The program includes a broad range of habitat restoration projects, including aquatic, sub-tidal, tidal, riparian, flood plain, and upland ecosystem.¹⁴

¹⁴ <https://resources.ca.gov/Initiatives/California-EcoRestore/What-is-California-EcoRestore>

8.3 Current Status and Trends

8.3.1 Understanding 'Delta as a Place' Today

The Delta is difficult to characterize as both a region and, likewise, a recreation destination. Unlike well-known water recreation destinations such as Lake Tahoe or Shasta Lake, the Delta is not a single waterbody and cannot easily be comprehended in its entirety. It has highly varied physical attributes and covers a vast and varied landscape that can be viewed and accessed from activity points that are so disparate, it is possible to repeatedly visit the Delta and still have little understanding of exactly what the Delta is or how large it is.

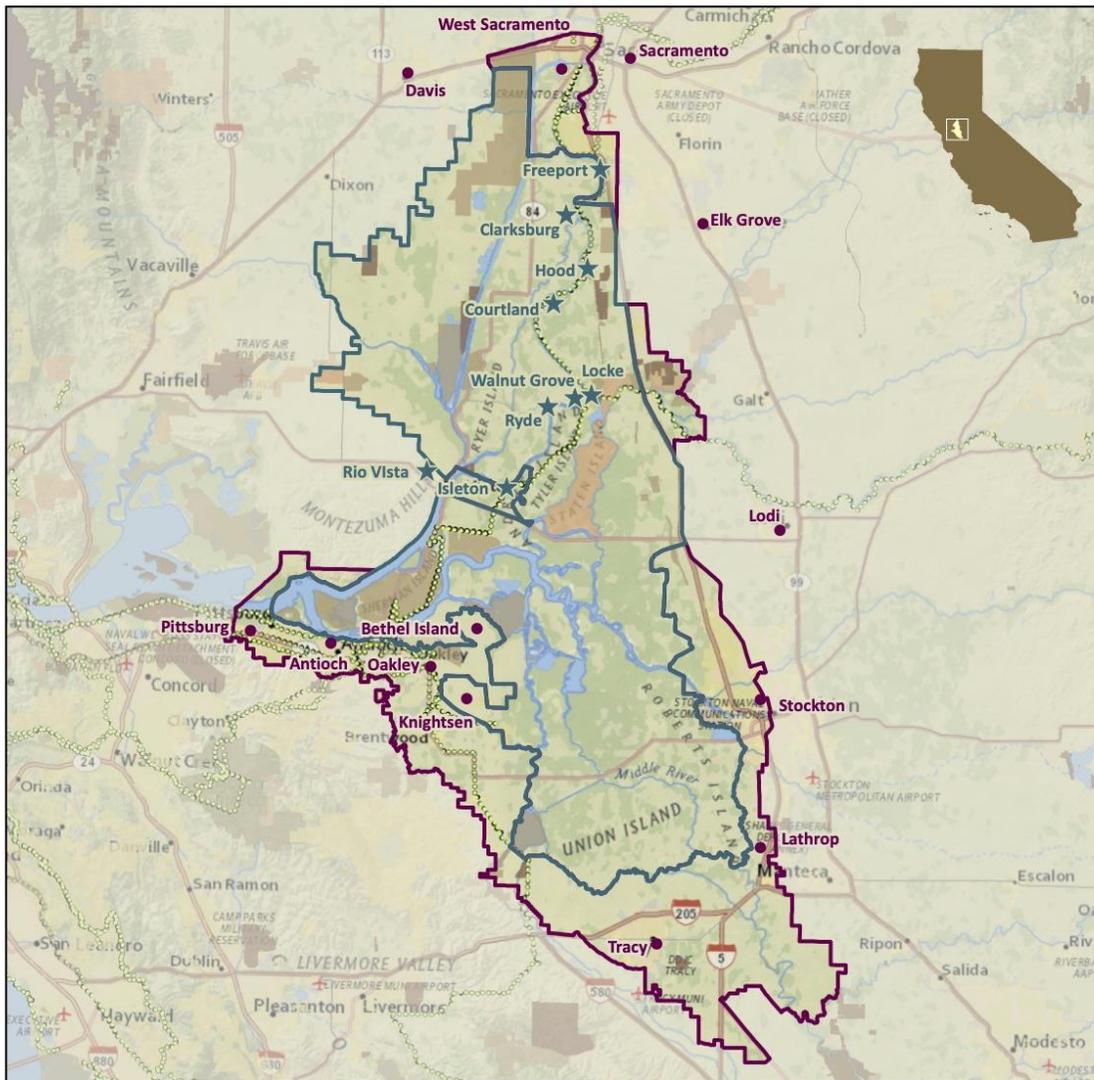
Extending more than 50 miles from north to south, the Delta is sometimes centered on a wide river, though more often it is a network of narrow channels, sloughs, and islands. It presents itself from two distinct vantage points, each with a completely different character. One view is from the water, where the landscape typically lies, unseen, behind tall levees and riparian vegetation, with only distant mountains visible. From the perspective of thicket-edged sloughs, narrow rock-faced channels, or spreading, open waterways, there is little landside context. The other view of the Delta, the landside perspective, largely precludes the water environment, which can be glimpsed primarily from levee-top roads and bridges. The predominant visual character landside is the agricultural landscape, which is as varied as the waterscape hidden on the other side of the levees.

This setting creates a place of paradox; it is a region that can seem unapproachable and ambiguous to visitors. For those who do not already know and visit the Delta, it can be a place that exists in name alone. Many people drive through the Delta without a clear sense of being in it and little notion of where it begins and where it ends. It is a region best accessed and explored by water, making it somewhat exclusive to those with boats, though there are many recreational opportunities for those seeking outdoor recreation, historical tourism, agricultural experiences, and other non-boating pursuits. Recognizing the national significance of the historical and cultural heritage of the region, Congress recently designated the Delta as a National Heritage Area.

Defining the Delta for visitors and recreation users is a necessary and yet difficult task. Because of the scope of the disparate environment, recreation destinations appear as a network of smaller recreation locations, each one suited to a different type of activity. To windsurfers, the open and windy waters of the larger channels flowing along the western side of Sherman Island might define the Delta. Water skiers and wake boarders might define the Delta by its protected narrower and straighter channels to the south, near Discovery Bay. Fishermen will be attracted to other aspects of the Delta, with differing characteristics, as varied as the fish they are seeking. So, too, kayakers, canoeists, pleasure cruisers, birders, hunters, cyclists, history buffs, wine lovers, and others, each seeking an aspect of the Delta specific to their interests and pursuits, will define the Delta in their own terms.

For the vast majority of visitors to the Delta who never reach the water's edge, the landscape will be essentially one of agricultural fields, levee roads with river views, wineries and farm stands, and a Legacy Community's historical or cultural landmarks. Figure 8-1 provides an overview of the Delta region.

Figure 8 - 1 Delta Region



LEGEND

- ★ Legacy Community
- City or Place
- Legal Delta Zone
 - Primary
 - Secondary
- Public Land
 - Federal
 - State
 - Local
 - Tribal/NGO/Other
 - Trail

This map has been prepared for general information purposes only. The map is based upon best available information. The background map was created using ESRI information.

Delta Region
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8.3.2 Existing Conditions

8.3.2.1 *Resource and Facility Analysis*

Existing Facilities

In the Delta, people seeking recreation experiences primarily go to private enterprises, including marinas, restaurants, retail establishments, wineries, and farm stands. Public recreation facilities exist, including State, county, regional, and city parks, but they are limited. Many are natural resources-based, restricted-use areas such as DFW's Wildlife Areas and the USFWS' Stone Lakes National Wildlife Refuge. Private nonprofit organizations such as The Nature Conservancy (TNC), Yolo Basin Foundation, and Solano Land Trust (SLT) also provide recreation opportunities, which generally are related to habitat areas.

Public Facilities

There are a number of accessible publicly owned lands in the Delta, covering over 58,000 acres¹⁵. Public recreation access on these lands includes hiking, day use, fishing, hunting, and wildlife viewing, though a portion is closed to public use as wildlife conservation areas.

Stone Lakes National Wildlife Refuge is the largest public facility, with 6,550 managed acres within its 17,640-acre boundary but provides limited public access in the form of waterfowl hunting, guided hikes, special events, bird watching, and canoe/kayak tours. Stone Lakes opened the Blue Heron Trails Visitor Contact Station in 2015, featuring a universally accessible trail, interpretation, an unstructured play area, restroom, and outdoor amphitheater.¹⁶

Brannan Island State Recreation Area provides some of the best public facilities in the Delta, though the park is now run as a concession through a private company, American Land & Leisure. The park includes four group picnic sites, 50 general picnic sites, grassy areas, a campground with 128 developed sites, four group camping sites, a cabin, a boat launch ramp, a fishing pier, sewage/bilge pump outs, non-motorized boat access, a swimming area, and berths and tie-ups for transient boats.¹⁷¹⁸ State Parks also operates Franks Tract State Recreation Area, a flooded submerged island, and the Locke Boarding House, a historical site.

DFW owns and manages a number of Wildlife Areas, including Acker Island, Sherman Island, Lower Sherman Island, Woodbridge Ecological Reserve, and Yolo Bypass Wildlife Area. These facilities provide for a variety of activities, from bird watching tours to hunting, fishing, wildlife viewing, and education.

A number of public access trails exist (though portions may be in development), including the Mokelumne Coast-to-Crest Trail, DeAnza Trail, and the Great Delta Trail. These trails currently support or will provide public access for a variety of recreation activities, including hiking and

¹⁵ <https://viewperformance.deltacouncil.ca.gov/pm/delta-tourism>

¹⁶ https://www.fws.gov/refuge/Stone_Lakes/ (accessed 5/18/20)

¹⁷ State Parks 2019, p. 22-23.

¹⁸ <http://www.americanll.com/americanll-campground-blog/2015/10/20/brannan-island-sacramento-california>

biking. A number of water trails have also been proposed or are in development. Additionally, State Highway 160 is a designated State Scenic Highway.

There are also a number of local and regional parks within the Delta, including those provided by the cities of Tracy, Stockton, and Lathrop, the counties of Sacramento, San Joaquin, Solano, and Yolo, and regional providers such as East Bay Regional Parks District. These parks and facilities include Antioch Marina, Antioch Public Boat Ramp, Big Break Regional Shoreline, Garcia Bend Park Launch Ramp, Louis Park Boat Launching Facility, Morelli Park Boat Launching Facility, Sandy Beach Park and Boat Launch Facility, Hogback Island Access, and Sherman Island Public Access Facility. Figure 8-2 shows recreation facilities.

Private Facilities

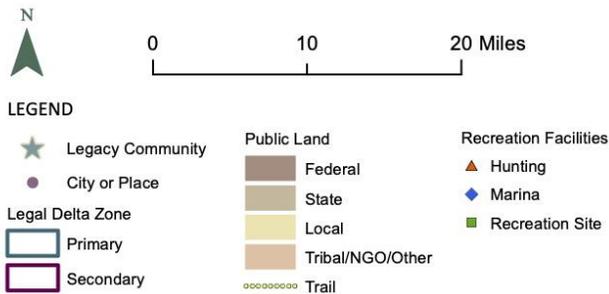
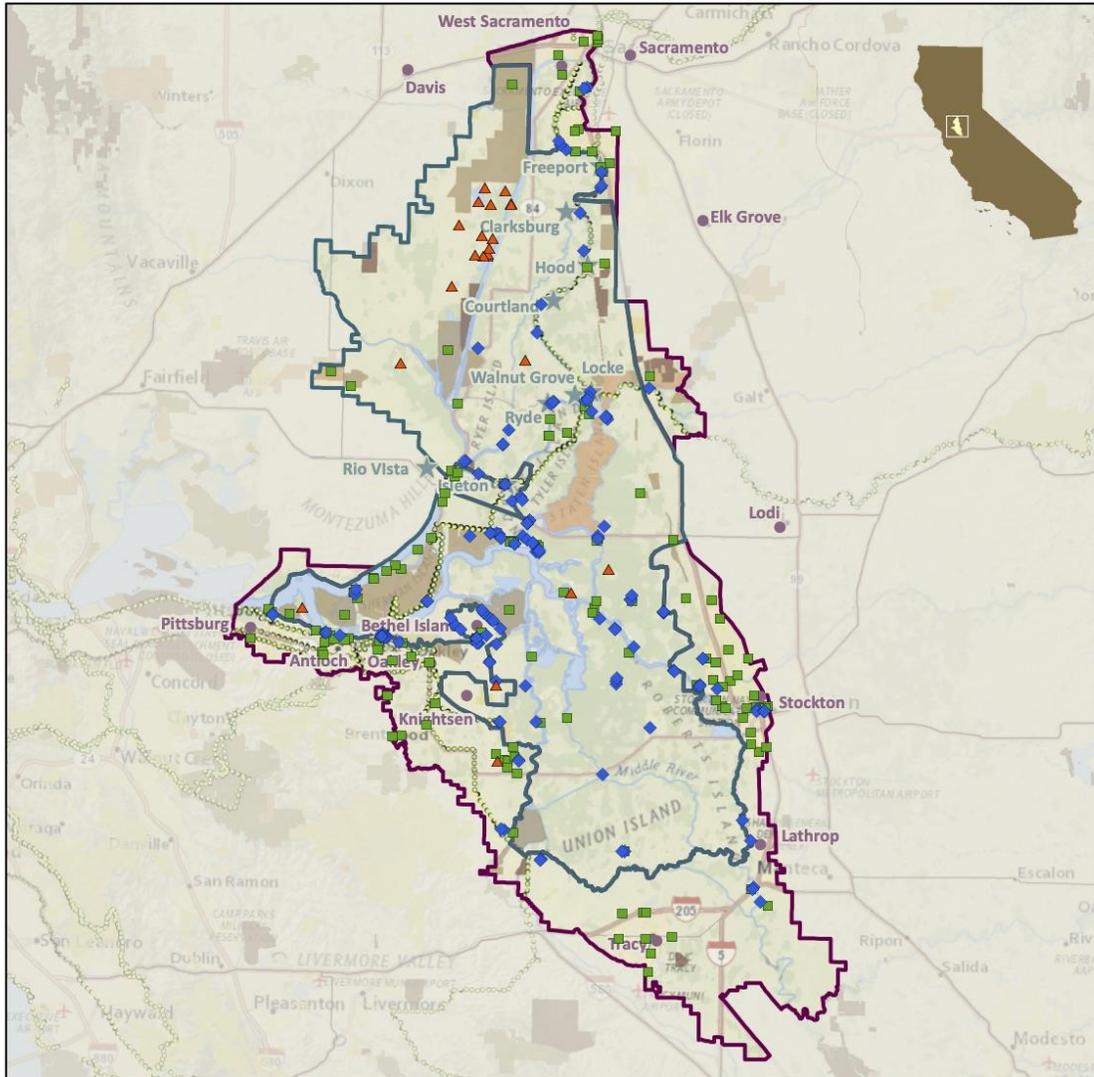
Marinas are a common Delta access point for water recreation, and most marinas in the Delta are privately owned and operated. These private marinas provide a number of facilities to the Delta boater, including boat slips, launch ramps, parking, restrooms, restaurants, picnic facilities, camping sites, pump outs, used oil collection centers, recycling centers, and fuel stations. Current data regarding business establishments in the Delta indicate that the number of marinas has decreased since 2008, from 112, to 97 in 2020.

The Delta's other major private recreation facilities are the numerous private hunting clubs, which typically are associated with agricultural lands. Very little information exists on the number of these facilities or the number of hunters who utilize them. There are 35 hunting areas listed on VisitCADelta.com website, which includes twelve public facilities. Conversations with hunters indicate that many additional formal and informal hunting clubs are located throughout the Delta.

Private nonprofit organizations such as TNC and SLT also provide for some public recreation on facilities that they manage. The Cosumnes River Preserve includes lands owned by both public and not-for-profit organizations including the Bureau of Land Management, DFW, DWR, TNC, Ducks Unlimited, Sacramento County, and SLC. The preserve has a visitor center with picnic areas, interpretive displays, restrooms, and three designated hiking trails, and allows bird watching, photography, hiking, and non-motorized boating and paddling.

Additional private facilities include those catering to Delta-as-a-Place recreationists and tourists, including restaurants, agricultural stands, and wineries. The VisitCADelta.com website, currently maintained by the Commission, lists twelve art galleries, eight museums, 27 historical sites, and 50 farmers markets, farm stands, U-pick orchards and wineries/tasting rooms (Figure 8-3).

Figure 8 - 2 Delta Recreation Facilities



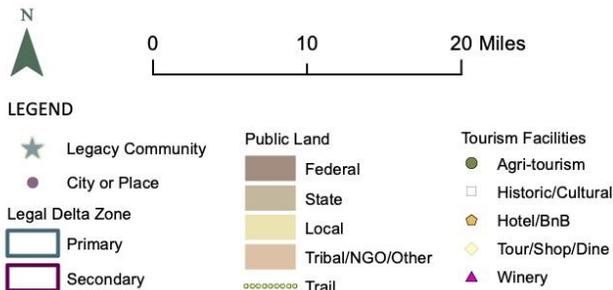
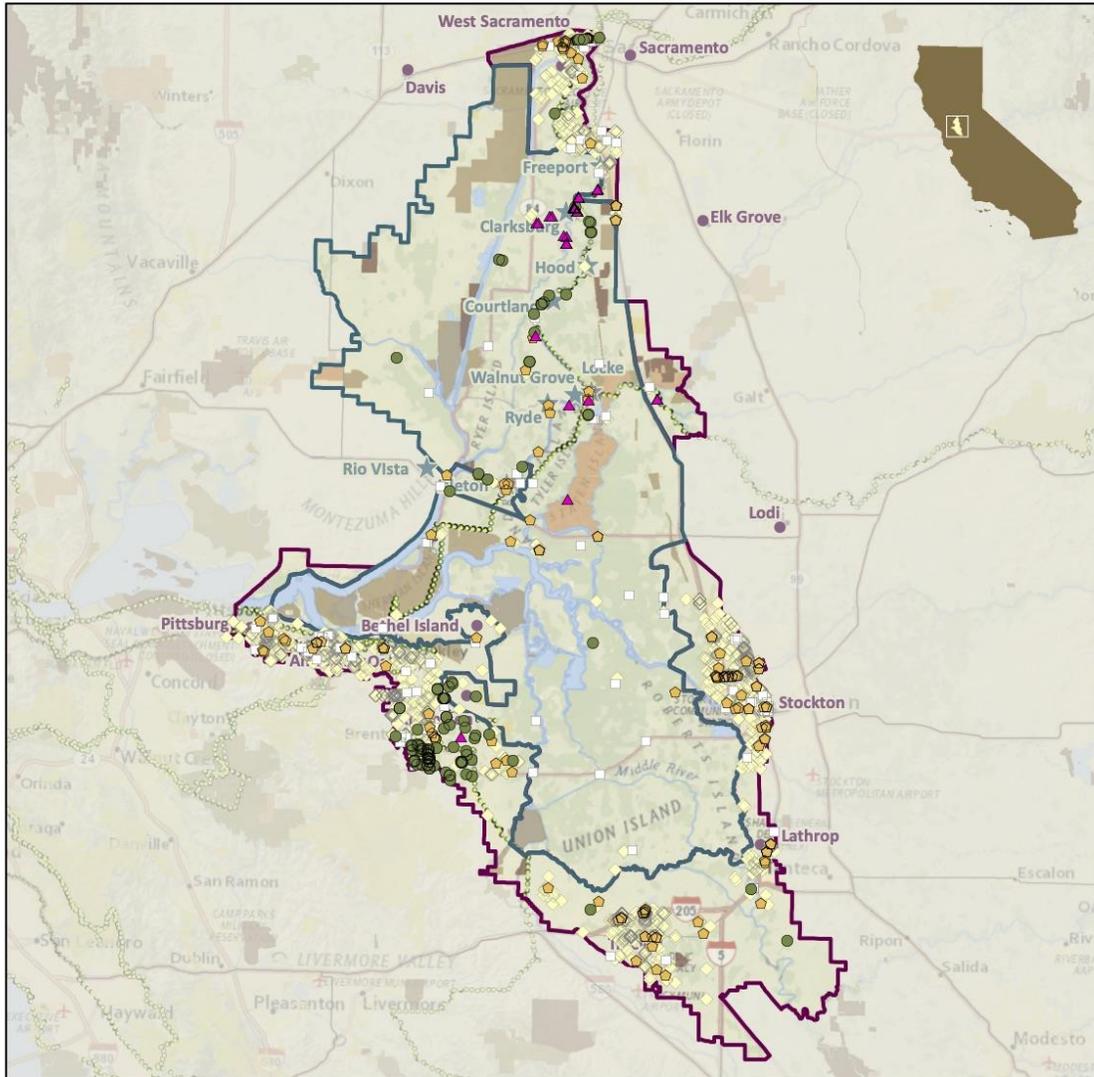
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Recreation Facilities DRAFT 7/29/20



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Figure 8 - 3 Delta Tourism Facilities



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Tourism Facilities DRAFT 7/29/20



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Recreation Enterprises in the Delta

A variety of data on Delta business enterprises describe economic activity attributable to recreation and tourism. As seen in Table 8-1 below, based on data related to Dun & Bradstreet business classifications, approximately 70 business enterprises within the primary zone are recreation-related. Notably, this represents a loss of 26 enterprises since 2008. In the secondary zone, there are over 2,400 recreation-related enterprises, though many businesses likely provide for broad urban and non-local recreation opportunities in addition to serving Delta recreation. This is an increase of 958 enterprises since 2008, mostly due to the ongoing development and suburbanization of the secondary zone.

Table 8 - 2 Data for Recreation-Related Establishments within the Legal Delta with Changes in Numbers of Establishments Since 2008

Industry Classification	Primary Zone Number of Establishments	Change since 2008	Secondary Zone Number of Establishments	Change since 2008
Boat Building ¹⁹	0	(-1)	8	(-11)
Recreational Vehicle Dealers	0	0	6	+2
Boat Dealers	6	(-2)	36	+6
Scenic and Sightseeing	0	0	1	(-1)
Performing Arts, Spectator Sports, and Related Industries	3	(-1)	240	+32
Museums, Historical Sites, and Similar Institutions	0	(-1)	28	+12
Amusement, Gambling, and Recreation Industries (including marinas)	28	(-6)	419	+164
Accommodation	18	(-4)	153	+5
Food Services and Drinking Places	15	(-11)	1544	+766
Total	70	(-26)	2,418	+958

Source: NETS; Hoovers; UOP

Many enterprises within the Delta, especially the marinas, offer more than one service. Table 8 - 1 above lists enterprises based on their primary business classification, as well as the primary address for their business, and the numbers may undercount certain services. For instance, several marinas also have restaurants, campgrounds, convenience stores, and provide

¹⁹ Boat repair services were also examined. In total there are 37 establishments offering boat repair services - five in the primary zone and 32 in the secondary zone. These establishments are included in Table 8-2 under Marinas, Boat Dealers and Boat Builders.

boat repair services, boat storage, or have fuel docks. Or, a scenic and sightseeing enterprise may have their office in Sacramento or the Bay Area but provide most of their services within the Legal Delta.

To expand the picture of the facilities and services that are offered by enterprises within the Delta, further research was done on individual establishments, as detailed in Appendix I, and summarized in Table 8-2 below. Restaurants listed here include those associated with marinas, in the primary zone, or located in Legacy Communities.

Note that the numbers between Tables 8-1 and 8-2 cannot be compared directly as Table 8-1 lists each individual business only once, while Table 8-2 may count the same business multiple times if it provides multiple services.

Table 8 - 3 Recreation-Related Facilities and Services within the Delta with Changes Since 2008

Type of Facility	Number of Facilities or Services	Change since 2008
Marinas	97	(-15)
Camping/RV Facilities	48	(-16)
Restaurants	64	(-17)
Fuel Docks	35	(-10)
Boat Builders	8	(-8)
Boat Dealers	35	0
Boat Repair	36	(-13)

Source: NETS, UOP

Within the recreation-related businesses, the detail for “Accommodations” was further expanded and is presented in Table 8-3. There are very few choices for recreation travelers for overnight accommodation within the primary zone. There are a number of additional hotels, motels, and bed and breakfasts within the secondary zone; however, they seem to primarily cater to travelers through the area, rather than in-Delta recreationists. In addition, 41 marinas offer camping for tents or RVs. Camping is also available at Brannan Island State Recreation Area. There are also small cabins available for rent in campgrounds and marinas.

Table 8 - 4 Accommodations within the Delta (excluding campsites) With Changes Since 2008

Hotels, Motels, and B&Bs	Number of Establishments	Change since 2008	Number of Rooms	Change since 2008
Primary Zone	2	+1	47	+15
Isleton and Rio Vista	3	(-1)	46	(-10)
Secondary Zone	72	+2	4,363	(-88)
Delta Total	77	+2	4,456	(-83)

Source: NETS, UOP

A growing trend in the Delta tourism economy is wineries and other agricultural related establishments, such as farm stands or “U-pick” operations. According to UC Davis, there were

13 wineries and 60 farm stands located in the Legal Delta in 2019, as detailed in Table 8-4 below.

Table 8 - 5 Wineries and Agricultural Tourism Establishments

Area	Wineries	Agricultural Tourism
Primary Zone	10	15
Secondary Zone	3	45
Delta Totals	13	60

Source: UC Davis

8.3.3 Constraints to Recreation

There are several physical and operational constraints related to Delta recreation which were detailed in *The Aquatic Recreation Component of the Delta Recreation Strategy Plan* (DPC 2006) and which have continued as constraints in more recent studies (AugustineIdeas 2014, Mickel et al. 2017, Mickel et al. 2018, Mickel et al. 2019, Milligan and Kraus-Polk 2018). The following constraints adversely impact facilities and recreation access and are described in more detail below.

- Sediment accumulation in channels, waterways, and marina operational areas
- Invasive aquatic vegetation that congests waterways, negatively affects water quality, destroys habitat, and clogs water supply pumps
- Waterway obstructions such as gates, screens, and barriers, snags, submerged debris, ADVs, and floating objects
- Water quality needs, enhancement, and protection
- Lack of boating destinations and launch points, particularly beach frontages
- Highly sensitive habitat areas with restricted public access
- User group conflicts
- Private lands and agriculture-recreation conflicts
- No single management entity
- Regulations (e.g., land use, environmental)
- Homelessness and Crime
- Other Issues

8.3.3.1 *Sediment Accumulation in Channels, Waterways, and Marinas*

Sediment deposits and siltation affect both Delta waterways and marinas. For instance, silt can accumulate from three to eight feet in a given year at marina facilities along the Sacramento River. Sedimentation has led to the closure of marinas and boating facilities in severely clogged channels.

The stringent regulations and lengthy, complex permit requirements for dredging silt out of channels and marinas burdens marina owners and boating facility operators. Marina operators have stated that dredging-related regulations should be streamlined or better coordinated among regulatory agencies to provide them more flexibility in the removal of silt materials. In

addition, channel dredging for levee maintenance is currently being slowed by the same regulation/permitting constraints.

The U.S. Army Corps of Engineers (USACE) had led a multiple-agency process called the Delta Dredged Sediment Long-Term Management Strategy (LTMS)²⁰ that aimed to clarify the permitting process relative to Delta dredging and reuse projects. This process stalled in 2014 and has not been funded since, even though a USACE report found the project would benefit the Delta.

8.3.3.2 Invasive Species

Numerous non-native plants have invaded the Delta, including water hyacinth (*Eichhornia crassipes*), South American spongeplant (*Limnobium laevigatum*), Uruguay water primrose (*Ludwigia hexapetala*), Brazilian waterweed (*Egeria densa*), and curlyleaf pondweed (*Potamogeton crispus* L.). Water hyacinth, spongeplant, and water primrose all float on the surface as well as root along shorelines and are known as Floating Aquatic Vegetation (FAV)²¹. *Egeria densa* and curlyleaf pondweed are subsurface water weeds, known as Submersed Aquatic Vegetation (SAV)²².

By the 1980s severe infestations of water hyacinth had clogged navigation channels and marinas, creating problems for marina owners, safety hazards for boaters, and issues for the native ecosystem. *Egeria densa* forms dense, submerged mats of vegetation, which can accentuate the process of siltation, be dangerous for swimmers, and create operational problems for both boaters and water infrastructure. More recently, spongeplant, water primrose, and curlyleaf pondweed have become more problematic. A recent study calculated the total area in the Delta invaded by SAV/FAV has increased from 5,000 acres in 2008 to almost 17,000 acres in 2015²³.

DBW has primary responsibility for removing both FAV and SAV, though the program is underfunded given the magnitude of the problem. The program also encounters some controversy, since some boaters and anglers dislike the use of herbicides to control FAV and SAV, believing the chemicals endanger the fish. The products used by DBW have been approved by both US Environmental Protection Agency (USEPA) and the CA Department of Pesticide Regulation. In 2018, DBW treated approximately 2,500 acres of FAV and 4,500 acres of SAV.²⁴ A 2018 study by DBW identified floating debris and invasive species as the top two issues on Delta waterways²⁵.

More recently, in 2017, San Joaquin County was confirmed to have become invaded by nutria (*Myocastor coypus*)²⁶. Nutria is a large fur-bearing aquatic rodent that reproduces rapidly.

²⁰ USACE 2015

²¹ https://dbw.parks.ca.gov/?page_id=28995

²² https://dbw.parks.ca.gov/?page_id=28994

²³ Khanna et al. 2016

²⁴ <https://viewperformance.deltacouncil.ca.gov/pm/terrestrial-and-aquatic-invasive-species>

²⁵ Mickel et al., 2018, p. 28

²⁶ <https://wildlife.ca.gov/Conservation/Invasives/Species/Nutria>

Native to South America, and are found near rivers, streams, lakes and ponds. Nutria cause various types of damage through burrowing and intense herbivory. Nutria have not currently been found in the legal Delta but are a potential threat if they are able to build burrows in the levees in the Delta, making them susceptible to breach, weakening, or erosion. Nutria also cause damage to native plant communities and soil structure, as well as agricultural crops. DFW is working to eradicate nutria from California, in part using grant funding from the Conservancy.

8.3.3.3 Waterway Obstructions/Barriers

Studies have repeatedly cited water obstructions as a significant problem for boaters. The Franks Tract area has been identified as an especially dangerous area for boating because it was once a levee-protected island and now, although flooded, is shallow and obstructed by submerged levee remnants, invasive aquatic vegetation, increased siltation, snags, and other debris²⁷.

Snags, debris, floating logs, and ADVs in Delta waterways are very dangerous to boaters throughout the Delta. Until about 30 years ago, USACE was responsible for keeping the waterways clear but no longer solely provides that service. Some responsibility has fallen to local county sheriffs' departments, which oftentimes lack the manpower, proper equipment, and funding to adequately provide obstruction-removal services and to remove the seasonal "crop" of flotsam that follows winter high-water flows.

Some local assistance funding for the removal of abandoned recreational vessels and other marine debris is provided through the DBW's Surrendered and Abandoned Vessel Exchange (SAVE), formally known as the Abandoned Watercraft Abatement Fund (AWAF), though needs exceed funding availability. In 2019, \$716,500 was granted through this program to Delta cities and counties, while a little over \$1 Million was granted annually in 2017 and 2018²⁸.

The Delta Cross Channel and gates (operated by USBR and located in Walnut Grove) is an important link for recreational boaters. Although originally built just for water management, it allows, when open, for direct access from the Sacramento River area to some of the most popular boating areas in the Delta. In recent years, it has been open most days per year²⁹, but operation periods are variable, and boaters typically do not know in advance whether it will be open or not. In addition, the clearance does not allow use by larger boats or sailboats.

Other gates, screens, and barriers that exist throughout the Delta include Montezuma Slough Salinity Gates, South Delta Temporary Barriers (operated by DWR)³⁰, and a wide variety of bridges and drawbridges. Many of these bridges are too low for taller boats and sailboats to go under, while boaters have to wait for sometimes long periods for drawbridges to open.

²⁷ Milligan and Kraus-Polk 2018

²⁸ DBW, 2020, personal communication.

²⁹ <https://www.usbr.gov/mp/cvo/vungvari/Ccgates.pdf>

³⁰ <https://water.ca.gov/Programs/Bay-Delta/Water-Quality-And-Supply/South-Delta-Temporary-Barriers-Project>

8.3.3.4 *Water Quality*

Surveys of boaters utilizing the Delta have frequently revealed water quality as one of the top-mentioned concerns or issues. Concerns associated with water quality included actual or perceived risks related to body contact, possible sewage contamination, aquatic weeds, salinity, harmful algal blooms (HAB), and water clarity. Boater perceptions of water quality may also differ from water quality best suited for native fish species (i.e., turbidity). In a 2009 study, 70 percent of boaters were concerned about water quality for drinking while 63 percent of boaters were concerned about water quality for swimming.³¹ In a 2017 study, boaters responding that their boat use had decreased in the Delta and blamed poor water quality as a top reason for the decrease.³²

8.3.3.5 *Lack of Boating Destinations*

Surveys of boaters also have found a high desire for more boat-in destinations within the Delta.³³ These requests tend to take three different forms.

- Boat-in mooring, floats/piers, restrooms, and camping attractions
- Day-use areas with restrooms, picnic, fish cleaning, pump-outs, and beach facilities
- Additional convenience/day-use/transient docks adjacent to restaurants, day use, or Legacy Communities, such as that established adjacent to Walnut Grove

These facilities, if located outside Delta communities and without proper management, can create problems for adjacent agricultural interests. If development of such new areas is contemplated, they should identify the management entity, include management plans for maintenance, and be placed adjacent to public lands or in areas that mitigate the risk of trespass, vandalism, and other use conflicts.

8.3.3.6 *Highly Sensitive Habitat Areas*

There are several existing proposals (e.g., Delta Plan, EcoRestore, Delta Conservation Framework) to expand and enhance habitat areas in certain waterways and islands. Conflicts can occur between recreational boating and habitat interests, depending on the boating activity, speed, motor, seasons, and frequency. Additionally, conflicts may result if the public is precluded from recreational access in these proposed restored-habitat areas. Several studies have provided information for how habitat managers can mitigate these potential conflicts.³⁴

8.3.3.7 *User Group Conflicts*

The diversity of boating activities in the Delta, from high-speed wakeboarding and personal watercraft (PWC) usage to fishing and non-motorized craft (e.g., stand-up paddleboard, canoe, kayak) results in conflicts between some user groups. In a 2018 study, 10% of motorized

³¹ DBW 2009, p. 134

³² Mickel et. al, 2017, p. 16, 38

³³ Mickel et al., 2017, p. 38, Mickel et al., 2018, p. 26

³⁴ Sloop et al. 2018, Milligan and Kraus-Polk 2016

boaters and 12% of non-motorized boaters in the Delta identified conflicts with reckless PWC operators as an issue. 15% of non-motorized boaters also identified conflicts with motorized boaters as an issue³⁵. Oftentimes conflicts are just a lack of common courtesy, rather than citable offenses. However, with multiple entities managing and policing water recreation use, basic rules and regulations and law enforcement presence may vary substantially.

In 2018, DBW began the California Boater Card program for operators of motorized boats on State waterways³⁶. By 2025, all boat operators will be required to possess a valid card. Operators must pass a state approved boater safety education exam in order to apply for a card. It is hoped that the California Boater Card program will increase safety and reduce conflicts on California's waterways.

8.3.3.8 Private Lands and Agriculture-Recreation Conflicts

Many potential conflicts have been identified between recreation and agriculture. Concerns about law enforcement were so prevalent among stakeholders, that the Conservancy investigated the issues. They found that from both law enforcement and Delta residents' perspectives, trespass and theft are two major conflicts between agriculture and recreation.³⁷

Trespass violations may stem from recreationists' misunderstanding of what property is public and what is private. Improving and increasing signage and other forms of boundary markers along private property and shorelines may help. Clear signage, however, does not deter some who desire to use a specific area. Along with trespass, another issue is theft of boats and farm equipment, including copper wire theft. Because the Delta is so geographically large and sparsely populated, it is difficult to patrol. Additionally, law enforcement generally falls to the respective five Delta counties Sheriff's Offices, which have been spread thin by budget cuts and increasing responsibilities³⁸.

8.3.3.9 No Single Management Entity

The lack of jurisdictional coordination, with no single agency ultimately responsible for management, has left an absence of adequate, coordinated waterway maintenance and security in order to enforce regulations and control user group conflicts. A single common set of regulations does not exist in the Delta, with the exception of "No Wake Zones" adjacent to marinas. In addition, marine patrol is fractured between ten different agencies over five counties, with limited funding. Safety laws are the primary concern, along with enforcement of pollution laws, speed violations, negligent operators, equipment violations, lack of life jackets, alcohol consumption, and poaching. With no single management entity responsible for ongoing repairs, maintenance, and cleaning, waterways are often left to degrade. In addition, new facility construction is almost non-existent. For instance, even though surveys have indicated a need for floating restrooms in the Delta, DBW has indicated that due to the high cost, as well as

³⁵ Mickel et al. 2018, p. 28

³⁶ <https://californiaboatercard.com>

³⁷ Biegert et al., pp. 2-5

³⁸ Mickel et al. 2017, p.52-54

no one management entity and low law enforcement presence that may result in a high likelihood of vandalism, floating restrooms would be unsustainable in the Delta.

8.3.3.10 Regulations

The regulatory structure in the Delta is complex, with local, state, and federal regulatory agencies imposing many overlapping layers of law on private businesses. An overview of these policies and plans are summarized in Chapter 4 of the 2012 ESP as well as in Section 8.2.3 above. In many cases, regulations that are created to protect the Delta environment also inhibit the functioning of recreation-related businesses, or the development of new businesses. One example is the number of agencies that have input into the permitting process required to dredge a marina. Those can include up to three federal agencies, seven state agencies, and three local agencies; the process can take upwards of two years.³⁹

8.3.3.11 Homelessness and Crime

The issue of homelessness is one that is widespread throughout California and which has been increasing as housing prices and rental costs increase with the rising economy. Prior to the COVID-19 coronavirus pandemic, solving homelessness was identified as the Governor's top issue. In the Delta, notable increases in homelessness along the Stockton and Sacramento waterfronts have led to increased trash and refuse. Within the primary zone, there are many reports of homeless squatting or living in abandoned vessels, contributing to ADVs. Some members of the community feel the increased transient or homeless community have contributed to increased garbage and illegal sewage dumping, theft and drug use, and greatly increased safety concerns⁴⁰.

8.3.3.12 Other Issues

Other primary issues and operational risks that affect recreation and its economic potential include:

- Aging marinas and other infrastructure
- Continued lack of adequate levels of public funding for operations and maintenance of public facilities
- Development encroachment
- Flood and earthquake risk, rising sea level, and other issues associated with climate change
- Water conveyance management changes
- Little to no public access facilities and public restrooms
- Traffic congestion

Additionally, there is a perceived lack of information sources about the Delta and wayfinding signage to assist recreation users who are unfamiliar with the Delta.

³⁹ DPC 2006, p. 59

⁴⁰ See information in Section 8.3.4.4 about focus group input on this issue.

8.3.4 Visitation and Demand

8.3.4.1 *Defining Market Area*

In order to describe the economic impact of recreation on the Delta economy, the market area for Delta recreationists needs to be defined. Planners need to understand what percentage of users come from which areas, such as Delta counties, surrounding counties, Southern California, the western region of the United States, and beyond national borders.

In *The Sacramento-San Joaquin Delta Boating Needs Assessment*, the concepts of the Delta Primary and Secondary Market Areas were introduced.⁴¹ A survey of statewide registered boat owners found that 77% of respondents who reported they had recently boated in the Delta resided within approximately 75 miles of the Delta.⁴² This area was designated as the Primary Market Area for the Delta and included the counties of Alameda, Calaveras, Contra Costa, Marin, Napa, Sacramento, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, and Stanislaus. The study further defined a Secondary Market Area representing the point of origin of another eight percent of all Delta boating trips. The Secondary Market Area includes the counties of Amador, Colusa, El Dorado, Lake, Mariposa, Mendocino, Merced, Monterey, Placer, San Benito, Sonoma, Sutter, Tuolumne, and Yolo. Combined, the Primary and Secondary Market Areas represent approximately 85% of all Delta boating visitors (Figure 8-4). This 2020 Visitation and Demand update relies on the same Market Area established for the 2012 ESP, with current and projected population revisions to reflect up-to-date data and forecasting.

Although the Market Area concept originally was developed for boating recreation it is broadly applicable to the full suite of recreation and tourism activity in the Delta. While some visitors to the Delta do come from Southern California, out-of-state, and international locations, the majority of visitors are from Northern California. Visitors from the Market Area represent the focal consumer group for Delta recreation economy growth opportunities. A 2019 study⁴³ found the majority of respondents to a survey conducted at Delta events resided in the six Delta Counties, representing over 80% of survey participants.

Population statistics and trends for the Market Area are presented in Table 8-5. Activity participation numbers and demand estimates focus on this area. In summary, the total Market Area had a population estimate of approximately 13 million in 2020, with projections of 16 million by 2060.

⁴¹ DBW 2002, p. 6-4 - 6-6

⁴² A more recent statewide survey of boaters supports this overall Market Area conclusion, noting that boaters from the Central Valley, Sacramento Basin, and San Francisco Bay Area boated more days per year on the Delta than boaters from other regions of the state (DBW et. al 2011, p. 86-87).

⁴³ Mickel et. al 2019

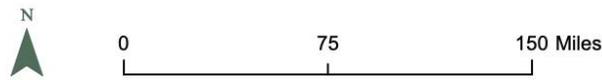
Table 8 - 6 Population Projections for the Primary and Secondary Market Areas

Year	2020	2030	2040	2050	2060
Market Area Population (millions)	13.1	14.0	14.8	15.5	16.0
Growth Rate	NA	7.1%	6.1%	4.3%	3.3%

Source: Projections Prepared by Demographic Research Unit, California Department of Finance, January 2020 (<http://www.dof.ca.gov/Forecasting/Demographics/Projections/>)

Within the Market Area for Delta recreation, other recreation areas actively compete for visitors and recreation tourism dollars. Residents of the Market Area have several different natural resource-oriented destinations within Northern California that they can visit. Boaters visit several lakes or reservoirs throughout Northern California, including Lake Tahoe, Shasta Lake, Lake Oroville, Clear Lake, Lake Berryessa, and Folsom Lake, among others, or recreate on San Francisco Bay. Anglers fish in the numerous lakes and reservoirs, but also in the streams and rivers feeding those lakes and reservoirs, such as the Feather, American, and Sacramento Rivers. People visiting historic or cultural areas also visit Old Sacramento, the Gold Country, or San Francisco. Wine tourists visit Napa, Sonoma, or the Sierra foothills. Other recreation and tourist destinations in Northern California include the Monterey Bay area, San Francisco Bay area, Lake Tahoe, Yosemite, the Sierras, and north coast redwoods as shown in Figure 8-4.

Figure 8 - 4 Delta Market Area and Competing Regions



LEGEND

- County
- Legal Delta
- Primary Market
- Secondary Market
- Regional Attraction
- Tourist Destination
- Interstate/Highway
- River
- Lake/Reservoir

This map has been prepared for general information purposes only. The map is based upon best available information. The background map was created using ESRI information.

Delta Market Area and Competing Regions DRAFT



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8.3.4.2 Statewide Recreation Survey/Study Summaries

To update the current status and trends in recreation and tourism in the Delta, a multitude of sources were reviewed, ranging from U.S. Fish and Wildlife Service (USFWS) to Commission publications. No single study or survey presents a complete picture of recreation and tourism visitation in the Delta. Furthermore, visitor spending and economic impact data also are limited. Some sources contradict or widely vary in their quantitative findings. Summary information from six key sources is presented below.

State Parks Surveys Recreation Demand Overview

CA State Parks completes a *Survey on Public Opinions and Attitudes on Outdoor Recreation in California* approximately every five years to comply with federal grant regulations and to “provide a comprehensive view of the outdoor recreation patterns and preferences of Californians.”⁴⁴ This survey historically has provided reliable data on the recreation preferences of Californians. The most recent available survey was conducted in 2012 and published in 2014. Statewide demand and participation rates (percentage of the population participating) for a sample of specific recreation activities that occur in the Delta are listed in Table 8-6.

Table 8 - 7 Summary of 2012 Survey of Public Opinions on Outdoor Recreation in California Demand and Participation Rates for Selected Activities Statewide in California

Activity Type	Average Annual Participation Days	Percentage Participation Rate
Walking for fitness or pleasure	46.4	63.8%
Bicycling on paved surfaces	25.8	35.5%
Driving for pleasure, sightseeing, driving through natural scenery	20.7	45.9%
Bicycling on unpaved surfaces & trails	13.5	20.7%
Wildlife viewing, bird watching, viewing natural scenery	35.1	46.8%
Outdoor photography	17.4	34.2%
Day hiking on trails	16.2	48.3%
Hunting	10.6	10.3%
Fishing-freshwater	9.1	25.9%
RV/trailer camping with hookups	8.9	16.9%
Swimming in freshwater lakes, rivers, and/or streams	8.0	35.9%
Visiting outdoor nature museums, zoos, gardens or arboretums	6.6	45.7%
Attending outdoor cultural events	6.6	46.4%

⁴⁴ State Parks 2014

Activity Type	Average Annual Participation Days	Percentage Participation Rate
Paddle sports	6.3	18.3%
Sail boating	6.2	10.6%
Visiting historic or cultural sites	6.1	45.3%
Motor boating, personal watercraft	5.5	15.9%
Camping in developed sites with facilities such as toilets and tables	5.4	39.5%
Picnicking in picnic areas	5.7	70.4%
<i>New Activity Not tracked in 2008</i> Shopping at a farmers' market	10.9	49.5%

Source: CA State Parks, Survey on Public Opinions and Attitudes on Outdoor Recreation in California 2012, published January 2014

The most popular activities enjoyed by the highest percentage of the public (Participation Rate) are picnicking, walking for fitness and pleasure, shopping at a farmer' market, day hiking, wildlife viewing, attending outdoor cultural events, driving for pleasure, visiting outdoor museums, and visiting historic or cultural sites. The activities in which participants engage the most often during the year (Average Annual Participation Days) are walking for fitness or pleasure, wildlife viewing, bicycling on paved surfaces, driving for pleasure, outdoor photography, day hiking, and bicycling on unpaved surfaces and trails.

According to the survey, many activities are showing shifts in the percentage of people participating (Participation Rate) and in average annual days of participation as compared to 2008 numbers. However, the survey report does not present participation trends across past surveys and some of these increases may be overstated due to differences in sampling populations. Nevertheless, this data is the most valid available estimate of activity days within California.

Notably, with the exception of paddle sports, day hiking, and visiting nature museums, the recent CA State Parks survey finds that participants report fewer annual days of participation than in past years, particularly in important Delta activities such as boating, fishing, and hunting.

U.S. Fish and Wildlife Service

The USFWS 2016 *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* presents findings from a survey completed every five years to measure the importance of wildlife-based recreation. The survey indicates that in 2016, approximately eight percent of the total population in the Pacific Region (which includes California) participated in either fishing or wildlife watching activities, while two percent of the population participated in hunting. The results of the survey are summarized in Table 8-7. Both Participation Rates and Average Annual Days of Participation per year are different than in the CA State Parks survey, possibly due to

differing methodologies and survey populations. Participation Rates are all lower in the USFWS survey, while Average Annual days of Participation are lower for hunting and wildlife watching, but higher than CA State Parks survey for fishing. USFWS also collects information on average trip expenditures, as presented below. Average daily trip expenditures are all higher in 2016 than in 2006.

Table 8 - 8 Summary of 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Activities in the Pacific Region by Residents and Nonresidents

Activity Type	Participation Rate	Average Annual Days of Participation	Average Trip Expenditures Per Day Per Participant (2016\$)
Fishing (Anglers)	8%	13	\$36
Hunting (Hunters)	2%	7	\$82
Wildlife Watching (Away from Home Participants)	8%	16	\$75

Data from USFWS 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

California Boating Facilities Needs Assessment

The *California Boating Facilities Needs Assessment* (BNA) analyzes boating facilities and boaters throughout the State. The study presents statewide data, but also provides information on specific waterways, facilities, and boaters in seven planning regions. Survey data were collected statewide from both motorized and non-motorized boaters, as well as to assess the economic value or recreational benefit of boating throughout the State.

In the most recent study (currently in draft), approximately 15 percent of motorized boaters and 20 percent of non-motorized boaters reported the Delta as one of their primary waterways. These numbers are lower than those reported previously by DBW in the *2007-2009 California Boater Survey*. The survey reported that in 2007, 17.8 percent of boat owners surveyed boated in the Sacramento-San Joaquin Delta at least once a year, using their boats on average 20.9 days in that location.⁴⁵ In comparison, in 2009 26.8 percent of those surveyed boated in the Delta, using their boats on average 25.4 days per year.⁴⁶ The current BNA only reported average days of use for statewide data, and found non-motorized boaters used their boat on average 67 days per year, while motorized boaters were at 13 days per year. The number of average days for motorized boaters is lower than previously reported. Non-motorized boating days are dramatically higher than any other survey and may be due to sampling biases.

⁴⁵ DBW 2011, p. 24

⁴⁶ Ibid, p. 86

State Registration and License Numbers

Another way to assess potential recreation demand is through an analysis of state registration and license numbers. These numbers represent actual numbers, rather than estimates of participation rates, and can help predict potential demand. The data is summarized below, while details for these numbers and changes over time can be found in Appendix H.

Registered Vessels

In California, owners of any sail-powered vessels over eight feet in length and any motor-driven vessel (regardless of length) that is not documented by the U.S. Coast Guard must register their boat with the Department of Motor Vehicles (DMV). Vessels propelled solely by oars or paddles (e.g., kayak, canoes) do not have to be registered.⁴⁷ In 2018, statewide, DMV reported 670,102 vessel registrations, a decrease of 140,000 vessels or 17% over eight years since 2010. Registration numbers have not been as low as 2018 since before 2000.

Since registrations are also reported by county, the Primary and Secondary Market Areas can be highlighted. In 2018, there were 180,426 vessels in the Primary Market Area and an additional 90,287 in the Secondary Market Area, a decrease since 2010 of approximately 16% and 13% respectively.

Table 8 - 9 Total Vessel Registrations by Year within the Delta Market Area and Statewide

Year	Primary Market Area	Secondary Market Area	Statewide
1980	186,494	51,419	556,001
1990	242,765	85,940	795,335
2000	252,673	106,868	902,447
2010	214,163	103,408	810,008
2018	180,426	90,287	670,102
Change (2018 versus 2010)	(-33,737)	(-13,121)	(-139,906)

Source: State of California Department of Motor Vehicles 2019

Resident Sport Fishing

In 2019, 1,007,428 resident sport fishing licenses statewide were issued by DFW, compared to 1,179,312 in 2009, a drop of 14%.⁴⁸ These numbers have been somewhat steady since 2011 and may represent a stabilization of fishing over the past ten years. The recent *Socioeconomic Indicators Report* found that in 2015, approximately 8% of all fishing licenses sold in California were sold in the Delta. However, fishing licenses are not necessarily sold where they are used,

⁴⁷ A DBW study estimated a total of over 1.7 million non-motorized boats (a category which includes inflatables, kayaks, canoes, rowing boats, sailboards/kiteboards, small sailboats, and others) in California in 2006 (DBW 2009, p. 2-1 – 2-2).

⁴⁸ <http://www.dfg.ca.gov/licensing/>

so these numbers may or may not represent the percentage of anglers recreating in the Delta.⁴⁹ Additionally, statewide numbers are used here as a point of comparison over time.

Table 8 - 10 Total Resident Sport Fishing Licenses by Year Statewide

Year	Total Statewide
2000	1,265,420
2009	1,179,195
2019	1,007,428
Change (2019 versus 2009)	(-171,767)

Source: California Department of Fish and Game’s website
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=59818&inline>

Hunting

In 2019, the state issued 1,370,151 game bird hunting licenses and 2,040,946 general hunting licenses, which represents approximately five percent of the adult California population. The license counts are higher than 2009, but the participation rate percentage has fallen due to population increases. In 2009, the state issued 1,056,556 game bird hunting licenses and 1,683,445 general hunting licenses, which was approximately 6 percent of the adult California population. The hunting percentage in 2009 tracks well with demand numbers from 2008 State Parks but is half that as reported in the most recent State Parks survey, suggesting that the recent State Parks survey may overstate participation rates for hunting. The recent *Socioeconomic Indicators Report* found that in 2015, approximately 12% of all hunting licenses sold in California were sold in the Delta. However, hunting licenses are not necessarily sold where they are used, so these numbers may or may not represent the percentage of hunters actually recreating in the Delta.⁵⁰

Table 8 - 11 Total Hunting Licenses by Year Statewide

Year	Total Statewide	Game Bird Hunting
2000	1,562,659	945,611
2009	1,679,864	1,056,402
2019	2,040,946	1,370,151
Change (2019 versus 2009)	361,082	313,949

Source: California Department of Fish and Game’s website
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=59821&inline>

⁴⁹ Visser et. al 2019

⁵⁰ ibid

8.3.4.3 *Delta-Specific Recreation Survey/Study Summaries*

Four Delta-specific surveys and studies have been completed since 2012 regarding recreation, as summarized below.

- Inventory of Recreation Facilities in the Sacramento-San Joaquin Delta (DPC 2015)
- Recreational Boating Use of the Sacramento-San Joaquin Delta (Mickel et al. 2017)
- Delta Recreation and Tourism Survey Report (Mickel et al. 2019)
- Socioeconomic Indicators Report (Visser et al. 2019)

These studies help to fill in a more complete picture of Delta recreation and tourism. However, none are fully comprehensive visitor surveys that include total visitation numbers and specific activities and spending patterns. This lack of primary data continues to hamper planning and marketing efforts. Since the Delta is porous and there are virtually endless entry and exit points, a comprehensive visitor survey would be extremely costly and difficult to fund. As part of this update, focus groups were convened regarding Delta recreation to help augment published information and data. Findings from those groups are summarized below in Section 8.3.4.4.

Inventory of Recreation Facilities in the Sacramento-San Joaquin Delta

The Commission completed this *Inventory of Recreation Facilities in the Sacramento-San Joaquin Delta* in 2015 to update the recreation inventories it had previously done in 2005, in part to inform the Commission's land use planning, as well as this project. The key findings from this inventory update, as compared to 2005, were threefold:

1. Agritourism is an emerging opportunity, and that farmers, ranchers, and growers are expanding businesses to include wine tasting, u-pick operations, farm stays and tours, event venues, and direct sales.
2. Recreational boating in the Legal Delta was negatively affected by the economic downturn in the early part of the decade, with thirteen marinas closing between 2012-2015, and twenty marinas closing since 2005. There was a companion trend of declining boat sales during the same time period.
3. Finally, the report noted that recreation trend analysis is difficult within the Delta due to inconsistencies over time in survey methods and definitions.

Recreational Boating Use of the Sacramento-San Joaquin Delta

This report focuses on results from surveys with owners of registered motorized boats both within and outside the Delta region. As part of this report, the authors also held three group discussion meetings, and contacted local law enforcement to gather additional input.

Registered motorized boaters within the primary and secondary zones of the Delta and its outlying counties (within the Primary Market Area) completed 728 on-line surveys. Of the respondents, 76.6% had boated in the Delta in the last two years. These boaters indicated that they boated an average of about fourteen days in each of 2014 and 2015. Issues that boaters identified as top concerns included water quality and invasive weeds. Facilities that boaters identified as less available included showers, mooring fields, utilities, fish cleaning stations, boat camping, restrooms, boarding floats, pumpout stations, floating docks/piers, and transient

facilities/tie-ups. For respondents who had not boated in the Delta in the past two years, the number one reason was a lack of information about boating opportunities.

Delta Recreation and Tourism Survey Report

This report provided information on visitor and local resident recreation preferences and information sources they utilize, as well as economic impact analyses of two festivals/events. Information was gathered at four festivals, as well as through an on-line survey tool. The report found that the typical Delta visitor engages in recreation fourteen days/year, while locals average 30 days/year. On a typical day trip, locals spent \$45.83/person/day, while visitors spent \$30/person/day. Visitors reported spending \$47.17/person/day on multi-day trips. Desired areas for improvement for Delta recreation and tourism included more information, policing, roads/safety, environmental quality, easier access to water/boating, more events, and improved amenities (restaurants, stores, etc.).

Socioeconomic Indicators Report

This report “provides a quantitative snapshot for benchmarking policy progress in the Sacramento-San Joaquin River Delta region”. It is anticipated that the statistical indicators in the report will be updated regularly to “monitor and track the socioeconomic healthy and vitality of the Delta region.” The socioeconomic indicators generally show that agriculture and recreation are the backbones of the Delta’s economy. The report recommends finding additional data on docks, campsites, and park visitation. The report found a transition of agriculture away from row crops and the potential to increase agritourism but cautioned that any increases to population and/or tourism could negatively affect the region’s roads and other infrastructure. The report found that in 2015, approximately 12% of all hunting and 8% of all fishing licenses sold in California were sold in the Delta. However, both hunting and fishing licenses are not necessarily sold where they are used, so these numbers may or may not represent the percentage of hunters and anglers recreating in the Delta.

8.3.4.4 Focus Groups

Introduction

Despite the number of recent studies, there are still gaps in quantifiable data about recreation and tourism in the Delta. The data called for in the 2012 ESP was “An up-to-date visitor survey with new primary data, particularly on non-boating and non-fishing recreation”. There is still a wide data gap in this area, but because the Delta is so porous, with so many points of entry and exit, both by land and by water, completing an accurate visitor count likely would be time and cost prohibitive. Rather than attempt such a comprehensive visitor survey as part of this project, five focus groups were conducted virtually in February through April 2020. The focus groups help deepen understanding and provided additional qualitative data for analysis, although the results do not completely fill this ongoing data gap.

The overall objectives for the focus groups was fourfold:

1. Gather insights regarding trends, successes, opportunities, weaknesses, failures, barriers, and potential solutions to the economic sustainability of Delta recreation and tourism.

2. Investigate existing business owners' ability to create a cohesive infrastructure and growth opportunities for recreation and tourism.
3. Examine ways to expand the customer base of the Delta by listening to the interests, motivations, and challenges of current visitors as well as those living in the area who are less likely to recreate in the Delta.
4. Evaluate the current name recognition of the Commission and projects or programs such as the Great Delta Trail, NHA designation, Delta Marketing Task Force, and the website VisitCADelta.com.

Five focus groups were conducted via phone and web-based participation from February through April 2020 and represented a cross section of the Delta recreation and tourism sector, including marina owners, other business owners (two groups representing both northeast and southwest businesses), activity participants, and underserved communities. A summary of the focus groups is presented below. A full report is attached as Appendix N.

Marina and Business Owners

Three different focus groups were conducted with nineteen people that own businesses in the Delta; one group was composed solely of marina owners, the additional two groups represented other types of recreation and tourism businesses including a hotel, winery, restaurants, tour or guide services, retail, and museums.

Most business owners were slow to recover from the 2008 to 2009 recession but were very positive about the future of their business (at least prior to the COVID-19 pandemic). The business and marina owners loved the peacefulness and beauty of the Delta but were worried about the growing homeless population and associated issues, increased traffic, and the effect of the planned Delta Conveyance Project.

They felt that the strengths of the Delta included its proximity to both Sacramento and the Bay Area, its extensive natural resources, its slow, peaceful vibe, and the diversity of recreation available. The barriers to doing business in the Delta were multiple:

- Lack of awareness of the resources of the Delta by potential clients
- Public perception that Delta is only for summertime, rather than year-round activities
- Lack of infrastructure, including roads, bathrooms, parking
- Limited amenities and services, and unreliable hours of operation
- High employee turnover, pay expectations, and overhead costs
- Homeless activity is increasing, unappealing, and deters visitors
- Sunken boats, abandoned marinas, and vacant storefronts are unattractive and also deter visitors
- Tunnel project, invasive water weeds, and water quality are concerns
- Average age of customers is increasing, and younger people tend to prefer different experiences, resulting in a shrinking customer base

In spite of these barriers, many business owners had plans to add more amenities and programs, make improvements, and expand. However, they were cautious about unknown effects of the pandemic. When asked what they thought the Delta would look like in ten years, some participants thought that there would be fewer functional marinas and that water quality

would deteriorate with the tunnel project. However, most participants thought that in ten years it would be about the same. The sentiment was that even though large amounts of money are spent on solving the Delta's problems, very little ever changes.

Most marina and business owners were aware of the Commission, but unaware of its purpose or many of its programs. Most owners had not heard of the Great Delta Trail, the NHA designation, Delta Marketing Task Force, or the website VisitCADelta.com. However, when programs were described, most business owners responded positively about the potential for these programs to help the Delta and/or their businesses.

Activity Participants and Underserved Community

One focus group was conducted with people who currently recreate in the Delta (activity participants) and another with people who live in or near the Delta that have barriers to recreation (underserved communities). Activity participants were older, more affluent, and predominantly Caucasian; the underserved community members tended to be younger, less affluent, and racially diverse.

In general, both groups were attracted to the Delta because of its natural beauty and peacefulness. Similar to the business owners, both groups expressed concerns with homeless activity and associated issues.

Activity participants enjoyed a variety of both individual and group-based interests, including wine tasting, dining out, fishing, sculling, motorized boating, kayaking, biking, camping, wind surfing, and hunting. Underserved community participants tended to engage in more family-oriented activities, such as picnicking, barbecuing, or driving for pleasure, or hanging out with friends outdoors or at bars.

Activity participants expressed frustration with the lack of overnight accommodations and both groups expressed the desire for more event, activity or festival information. Both groups were concerned about safety, due to real or perceived danger from homeless activity, water quality, or traffic and roads. Both groups felt there was need for more restrooms, parking, and public parks, and were concerned with abandoned boats and closed buildings.

The underserved community participants described additional barriers preventing them from recreating more in the Delta:

- Safety concerns and reluctance to explore new unfamiliar areas
- Lack of facilities and affordable options for families
- Perception that marinas mostly cater to Caucasians
- Challenge to find events or places to do something interesting and affordable

Looking towards the future, participants would like to see a cleaner Delta with improved water quality, infrastructure upgrades, new public facilities, and additional events and activities.

Most participants were unaware of the Commission and confused about what agency or entity is "responsible" for the Delta. Most participants had not heard of the Great Delta Trail, the NHA designation, Delta Marketing Task Force, or the website VisitCADelta.com. However, when shown the website, most participants felt it would be very useful to them in the future.

Focus Group Key Findings and Recommendations

A number of Key Findings and Recommendations resulted from this selected focus of recreation-related business owners and participants.

Key Findings included:

- The Delta is a hidden gem, located close to large metropolitan areas.
- Nature and access to the water are the most appealing aspects of the Delta.
- There is a shared desire to increase visitors without changing the character of the Delta.
- Businesses had planned to expand cautiously, prior to the COVID-19 pandemic.
- Homelessness, litter, dilapidated boats and vacant buildings give a bad impression, deter visitors and negatively impact businesses.
- Facilities and businesses are often hard to find or non-existent.
- The future of the Delta depends on increasing interest and visitation from younger generations.

Recommendations from this report were wide ranging, covering facilities and maintenance, and customers and visitor experiences, though not necessarily covering Commission responsibilities or the scope of this project. Some are chronic issues many organizations have been working on for years, and others are timelier. They included:

- Clean waterways in order to appeal to new tourists and residents –including cleaning up abandoned boats.
- Launch clean-up programs for the regular removal of trash with the help of local businesses, organizations, and community members.
- Develop infrastructure programs to fix roads and restore dilapidated buildings.
- Expand available parking and build more public bathrooms.
- Establish safe biking lanes and hiking trails.
- Promote to nearby urban residents the idea that the Delta is a place to unplug and connect with nature.
- Create full experience campaigns that include more than one activity at a time: Instagram moments but with character.
- Increase the number of annual events and advertise them within and outside of the Delta.
- Focus on and promote family activities for current Delta residents such as competitions, foot races, family hikes, family meals.
- The Commission should become the “go-to” source for everything related to the California Delta; create a reference directory for “All Things Delta.”
- Collaborate with businesses and facilitate networking to create a community of residents and local businesses.
- Engage with the youth and other diverse communities through apprenticeships in recreation, and summer camps, or Master Classes.
- Create the Delta Young Ambassador Program consisting of younger individuals trained by the Commission and other experts to highlight locations, businesses, and events in social media.

- Promote the combination of multiple services and activities (e.g. rent a kayak, receive half-priced lunch).

These findings are based on what a key number of participants and providers expressed and will be incorporated with the other data and analysis into the overall Recommendations of this report presented in Sections 8.4 and 8.5 below.

8.3.5 Delta Recreation and Tourism Visitation Estimates

There are few counts of actual visitor attendance in the Delta. Those that exist are limited and only represent a fraction of what is estimated to be the actual visitor count. Visitation numbers that were reported total a little over one million visitors and are presented in Table 8-11.

Table 8 - 12 Summary of Actual Visitation to the Delta

Site	Annual Visitors
Brannan Island SRA (day use, 2019)	27,688
Brannan Island SRA (camping, 2019)	11,594
Brannan Island SRA (boat launches, 2019)	4,645
Delta Meadows State Park (day use, 2017)	6,547
Franks Tract SRA	Non-reported
Stone Lakes National Wildlife Refuge (USFWS) (approx.)	30,000
Cosumnes River Preserve (approx.)	70,000
Decker Island Wildlife Area	300
Lower Sherman Island (CDFW) (approx.)	8,000
White Slough Wildlife Area (CDFW) (approx.)	3,650
Woodbridge Ecological Reserve (CDFW) (approx.)	8,500
Yolo Basin Wildlife Area (USFWS/CDFW) (approx.)	32,000
Sherman Island County Park (Sacramento County)	24,944
Hogback Island Fishing Access (Sacramento County)	4,080
Clarksburg Boat Launch (Yolo County, 2016)	19,183 ⁵¹
Belden's Landing (Solano County, 2018-2019)	20,926
Sandy Beach Park (Solano County, 2018-2019)	105,324
Dos Reis Park (San Joaquin County)	24,167
Mossdale Crossing Regional Park (San Joaquin County)	28,473
Oak Grove Regional Park (San Joaquin County)	162,466
Westgate Landing (San Joaquin County)	13,477
Antioch/Oakley Shoreline (East Bay Reg. Park District)	88,649
Bay Point Shoreline (EBRPD)	52,919
Big Break Shoreline (EBRPD)	137,981
Big Break Regional Trail (EBRPD)	73,118
Delta DeAnza Trail (EBRPD)	92,154

⁵¹ Yolo County 2016, p. 34

Site	Annual Visitors
Marsh Creek Trail	105,901
Totals	1,156,686

Sources: *State Parks 2017, personal communications*

8.3.5.1 Visitation Estimates by Recreation Activity Types

Lacking actual visitor counts and current visitor survey data, visitation must be estimated. One way to estimate visitation is by looking at overall participation estimates based on survey data such as that collected by State Parks. These participation estimates can then be related to the Market Area population to derive estimates. However, participation rates vary over time as recreation activities become more or less popular.

Section 8.3.4.2 presented information regarding participation in selected activities that occur in the Delta from the most recent State Parks' *Survey on Public Opinions and Attitudes on Outdoor Recreation in California*. As this survey has been taken approximately every five years, it is also a useful tool in looking at activity participation rate changes over time. However, as noted above, the relatively dramatic shifts in participation rates reported in the most recent survey raised questions about the comparability of the recent survey to past surveys.

To better capture long-term recreation participation trends, this study relies primarily on participation forecasting reported by *Outdoor Recreation Trends and Futures*.⁵² This statistical analysis provides national-level outdoor recreation participation projections for 17 recreation activities (or activity composites) through 2060. The participation forecasts rely on projection models that "relate recreation participation directly to factors known to influence this behavior." The modeling estimates recreation participation over time based on factors found to significantly affect participation, including changes in demographics (e.g., age, income, education). The models for each recreation activity are based on data from the *National Survey on Recreation and the Environment (NSRE)* data from 1999 to 2009. Though the participation trends are national, the statistical analysis of participation rates was deemed to be a reliable and consistent basis from which to trend participation in Delta recreation from the analysis conducted for the original 2012 ESP.

Recreation Activity Groupings

In general, the activity types in which Californians participate and the level of participation have varied over time in specific activities, including freshwater fishing, backpacking, wildlife viewing, organized sports, swimming in a pool, etc. The 2012 ESP established high-level recreation groupings to organize the visitation analysis, which are retained here for consistency with the earlier work and because they remain relevant. While CA State Parks has changed certain recreation categories over time (listing 42 activity categories in 1992, 55 in 2002, and 39 in 2008), the percentage breakdown between three broad clusters of recreation activities has tended to remain relatively constant. The discussion below provides an overview of (1)

⁵² Cordell 2012

Resource-Related Recreation, (2) Urban Parks-Related Recreation, and (3) Right of Way/Tourism-Related Recreation.

- **Resource-related** recreation includes that occurring in resource-related areas, including state and national parks, forest service lands, nature areas, reservoirs, rivers, the ocean, mountains, etc. Types of resource-related recreation include wildlife viewing, hunting, fishing, boating, beach activities, camping, skiing, snowboarding, and swimming in lakes, rivers, and the ocean. Historically, approximately 25 to 30 percent of all recreation has been resource related in California.
- **Urban Parks-related** recreation includes those activities that generally take place in developed parks, such as using play equipment, swimming in a pool, using open turf areas, golf, tennis, and team sports. Historically, urban parks-related recreation has represented approximately 16 to 23 percent of all recreation activity days.
- **Right of Way/Tourism-related** recreation represents the largest levels of participation over time and includes hiking, jogging, walking, bicycling on paved surfaces, driving for pleasure (i.e. sightseeing), off-highway vehicle use, and other road- and trail-based recreation. Historically, this type of recreation has represented approximately 48 to 58 percent of all activity days in California, with walking for fitness and pleasure generally the highest ranked activity, by both percentage of participants and number of days of participation.

In the Delta, there is some level of use in each of the three recreation categories. As one of the more unique resource attraction areas in the State, it is only logical that primary uses would be resource-related activities. These include all variety of both motorized and non-motorized boating, camping, nature study/bird watching, hunting, and fishing.

In 2000, researchers estimated 6.4 million boating visitor days per year (including fishing from a boat) occurred in the Delta.⁵³ At the time, projections were made that this use would grow by one percent a year, but with the 2008 to 2009 recession's impact - on motorized boating in particular - as well as the overall lack of investment in facilities and upgrades in the Delta, the 2012 ESP concluded that Delta recreation levels likely were similar to 2000. The 2012 ESP estimated that non-boating accounted for roughly 1.5 million visitor days of use annually, with a combined total of approximately 8 million resource-related visitor days of use per year.

In addition, the cities bordering the Delta have taken advantage of the Delta's waterways and scenic resources by locating both resource-related facilities and city parks on the edges of the Delta. For instance, Sacramento's Garcia Bend Park, on the Sacramento River, combines boat launching, bank fishing, and levee-top trails with organized sports, children's play, and informal park day uses. Stockton has located its largest city park and a major recreation-related redevelopment area adjacent to Delta waterways. The 2012 ESP identified approximately 300 acres of urban park and recreation areas bordering Delta resources located in the various

⁵³ DBW 2002

communities that surround the Delta and estimated an additional 2 million visitor days at urban parks.⁵⁴

Driving for pleasure in the Delta is very popular and is a prime example of the right of way/tourism-related recreation use. This recreation category also includes bicycling, hiking, and walking. The winding roadways, picturesque bridges, scenic views of waterways and agricultural areas, Legacy Communities, and historic structures all contribute to its appeal. The ability to buy fresh fruits and vegetables straight from the grower, visit a winery and sample their product, stop and pick up a freshly made deli sandwich or an ice cream at a 50-year-old grocery store all deepen the Delta experience. To many, the resources are part of the charm—the historical town of Locke, the wildlife preserves, or even the beautiful oak tree canopies shading the roadway. The 2012 ESP estimated the Delta right-of-way-related recreation at approximately 2 million visitor days per year.

Combining the above estimates (8 million resource-related, 2 million right-of-way-related, and 2 million in urban parks around the edge), the 2012 ESP estimated total visitation at about 12 million visitor days. This reflected little change from CA State Parks estimate in the 1990s of annual use of 12 million days in the Delta. Since that time, population in the Market Area has increased, but there has been limited investment in new facilities or upgrades to existing facilities. The constraints outlined in Sections 8.3.2 and 8.3.3 above have not been resolved, and in some cases have only worsened and degraded over time (e.g., lack of dredging, water quality).

Following the 2012 ESP methodology and employing new and better data as appropriate, the 2020 recreation visitation analysis finds that recreation in the Delta likely is about the same as the 2012 ESP estimate, totaling about 12 million visits.

8.3.5.2 Market Demand-Based Delta Visitation Estimates

The Delta visitation estimates presented in the ESP derive from county-level population data in combination with recreation participation rates and activity day data for a range of recreation types. This participation-based recreation demand model methodology involves the following:

1. Participation rates and activity days (per participant) for various Delta activities are established based on survey data;
2. Delta market capture rates for various recreation activities are determined as a percentage of market demand, considering other recreation opportunities available to residents of the Market Area; and
3. Population levels in the Market Area, participation rates, and Delta capture rates are combined to yield estimates of recreational demand, expressed in visitor day counts, for each recreation activity.

⁵⁴ Dangermond 1993, Table 15.2, p. 219

These estimates result in 12 million recreation visitor activity days per year in 2020⁵⁵, indicating that visitation has been essentially flat for the last 30 years. Appendix H presents the detailed data from this participation-based demand model.

Recreation activities can also be broken down into the categories described above: resource-related, urban parks-related, and right-of-way/tourism-related. The urban parks-related category was not included in the market demand estimates, which was previously estimated to be another 2 million activity days per year.

Resource-related activities generate an estimated 7.9 million activity days per year, while right-of-way/tourism-related activities result in a roughly 2.1 million activity days per year. These ranges are similar in magnitude to those discussed above and are summarized in Table 8-12. The increase of 300,000 resource related visitor days is largely attributable to better data (e.g., Delta-specific boater days from the BNA and the *Recreational Boating Use of the Sacramento-San Joaquin Delta* studies), more so than an actual increases in recreation activity in the Delta over the last decade.

Table 8 - 13 Summary of Demand Based Visitation Estimates to the Delta (Estimates of Visitor Days in Millions)

Type	Estimate of Visitor Days (2010)	Estimate of Visitor Days (2020)
Resource Related	7.6	7.9
Right-of-Way Related	2.1	2.1
Urban Parks Related	2.0	2.0
Total	11.7	12.0

Sources: Dangermond Group and EPS

* Demand for urban parks is not estimated by the visitor market analysis.

These estimates are based on limited available data and professional judgment of the planning team. Ongoing efforts to collect additional primary data to better document existing recreation visitation and spending, including hunting and non-boating and non-fishing recreationists, will continue to improve information that benefits Delta recreation planning and marketing efforts.

8.3.6 Economic Impact/Benefits

8.3.6.1 Current Economic Impact Model

The economic impact of Delta recreation is first assessed based on estimated visitation levels and trip-related spending, with non-trip spending added subsequently. As described in Section 8.3.5, it is estimated that the Delta currently receives approximately 7.9 million resource-related visitor days and 2.1 million right-of-way/tourism days (market demand-based estimates).

⁵⁵ Visitation modeling for 2020 has not incorporated the potential effect of the COVID-19 pandemic on recreation activity in the Delta.

This analysis estimates that average per-day expenditures for the resource-related and right-of-way/tourism recreation activities range from about \$31 to \$82 (2020\$) depending on the activity type, of which about \$14 to \$39 is spent in the Delta. Based on these per-day spending levels and the estimated Delta visitation, direct economic impact (i.e., spending) in the Delta economy attributable to resource-related and right-of-way/tourism recreation is calculated at approximately \$213 million (2020\$).

This visitation-based economic impact estimate focuses on resource-related recreation, including boating, fishing, hunting, and other activities (e.g., wildlife viewing), and right-of-way/tourism activities, including hiking, biking, driving for pleasure, and cultural activities. The economic impact analysis does not account for activities at the urban fringe, including urban park recreation (e.g., team sports). Resource-related and right-of-way/tourism activities are believed to account for the majority of economic impacts of recreation occurring in the Delta.

The economic impact of recreation within the Delta is calculated by multiplying activity-specific visitor days by per-day expenditure estimates. A visitor day is defined to be a day at a recreation site by a single person doing any and all activities. While visitors may participate in multiple activities, the analysis defines a primary activity to avoid double-counting visitors. The analysis relies on the distribution of visitation by primary activity shown in Table 8-13.

Table 8 - 14 Estimated Resource-Related and Right-of-Way/Tourism Visitation to the Delta by Activity

Activity	Visitor Days	Percent of Total
Boating, Fishing, and Camping	6.8 Million	68%
Hunting	350,000	4%
Other Resource-Related and ROW Activities	760,000	8%
Driving for Pleasure and Tourism	2.1 Million	21%
Total Delta	10.0 Million	100%

Sources: *The Dangermond Group and EPS*

Note: Activity categories reflect similarities in economic spending patterns

The analysis relies on average expenditures reported by boaters (including anglers), hunters, and recreationists participating in wildlife-associated activities to estimate spending in the Delta. Specifically, the analysis uses spending data from the most recent BNA and the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, sources which were found to be generally consistent with Delta-specific event surveys.⁵⁶ The analysis considers expenditures outside and inside the Delta, based on boating and fishing expenditure patterns reported by the *Sacramento-San Joaquin Delta Recreation Survey*.

Daily spending estimates specific to Delta trips recorded by the BNA are relied on to update 2012 ESP estimates. As previously described, the analysis assumes that resource-related and some right-of way activities (e.g., biking and hiking) spending is generally consistent with

⁵⁶ USFWS 1996, 2006, and 2016

expenditure patterns reported for wildlife viewing trips in the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. Driving-for-pleasure spending is also based on *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, though these data are adjusted to reflect lower levels of spending on lodging and recreational activities for driving-for-pleasure visits. All spending estimates are inflated to 2020 dollars using the Bureau of Labor Statistics Consumer Price Index (CPI) and are presented in Tables 8-14 to 8-17 below.

Table 8 - 15 Estimated Per-Day Per Visitor Expenditure for Boating, Fishing, and Camping (2020\$)

Expenditure Type	Expenditure Outside Delta	Expenditure Inside Delta	Total Expenditure
Accommodation	\$1.15	\$1.69	\$2.84
Food	\$4.85	\$7.10	\$11.94
Supplies	\$5.10	\$7.46	\$12.56
Other	\$4.55	\$6.67	\$11.22
Total	\$15.65	\$22.91	\$38.56

Table 8 - 16 Estimated Per-Day Per Visitor Expenditure for Hunting (2020\$)

Expenditure Type	Expenditure Outside Delta	Expenditure Inside Delta	Total Expenditure
Accommodation	\$8.15	\$6.00	\$14.16
Food	\$10.29	\$10.40	\$20.69
Supplies	\$17.34	\$12.22	\$29.56
Other	\$8.14	\$9.91	\$18.04
Total	\$43.92	\$38.53	\$82.44

Table 8 - 17 Estimated Per-Day Per Visitor Expenditure for Other Resource Related and ROW Activities (2020\$)

Expenditure Type	Expenditure Outside Delta	Expenditure Inside Delta	Total Expenditure
Accommodation	\$4.30	\$3.17	\$7.47
Food	\$6.27	\$6.33	\$12.60
Supplies	\$8.20	\$5.78	\$13.98
Other	\$1.93	\$2.34	\$4.27
Total	\$20.69	\$17.62	\$38.31

Table 8 - 18 Estimated Per-Day Per Visitor Expenditure for Driving for Pleasure and Tourism Activities (2020\$)

Expenditure Type	Expenditure Outside Delta	Expenditure Inside Delta	Total Daily Expenditure
Accommodation	\$1.07	\$0.79	\$1.87
Food	\$6.27	\$6.33	\$12.60
Supplies	\$8.20	\$5.78	\$13.98
Other	\$0.96	\$1.17	\$2.13

Expenditure Type	Expenditure Outside Delta	Expenditure Inside Delta	Total Daily Expenditure
Total	\$16.51	\$14.07	\$30.58

Table 8-14 – 8-17 Sources: Sacramento-San Joaquin Delta Recreation Survey (1997); California Boating Facilities Needs Assessment; National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (2016). Note that “Accommodation” includes spending at campsites.

The analysis estimates annual direct trip-related economic impacts from resource-related and right-of-way/tourism recreation by multiplying medium estimates for activity-specific visitor days by the per-day expenditure estimates. Current direct impacts are estimated at \$213 million inside the Delta (2020\$), as shown in Tables 8-18 to 8-22. Note that the economic effects are only calculated on the five largest Delta counties (excluding Alameda County), following the standards of the 2012 ESP.

Table 8 - 19 Estimated Annual Direct Delta Recreation Trip Spending Impacts for Boating, Fishing, and Camping (2020\$)

Expenditure Type	Expenditure Inside Delta
Accommodation	\$11,437,000
Food	\$48,160,000
Supplies	\$50,635,000
Other	\$45,250,000
Total	\$155,482,000

Table 8 - 20 Estimated Annual Direct Delta Recreation Trip Spending Impacts for Hunting (2020\$)

Expenditure Type	Expenditure Inside Delta
Accommodation	\$2,127,000
Food	\$3,683,000
Supplies	\$4,327,000
Other	\$3,509,000
Total	\$13,645,000

Table 8 - 21 Estimated Annual Direct Delta Recreation Trip Spending Impacts for Other Resource-Related and ROW Activities (2020\$)

Expenditure Type	Expenditure Inside Delta
Accommodation	\$2,405,000
Food	\$4,807,000
Supplies	\$4,387,000
Other	\$1,779,000
Total	\$13,378,000

Table 8 - 22 Estimated Annual Direct Delta Recreation Trip Spending Impacts for Driving for Pleasure and Tourism (2020\$)

Expenditure Type	Expenditure Inside Delta
Accommodation	\$1,695,000
Food	\$13,555,000
Supplies	\$12,372,000
Other	\$2,509,000
Total	\$30,131,000

Table 8 - 23 Total Estimated Annual Direct Delta Recreation Trip Spending Impacts (2020\$)

Expenditure Type	Expenditure Inside Delta
Accommodation	\$17,664,000
Food	\$70,204,000
Supplies	\$71,720,000
Other	\$53,047,000
Total	\$212,636,000

While visitor spending occurs in a wide variety of categories, the bulk of visitor spending is likely to occur at recreation facilities (i.e., marinas), overnight accommodations, restaurants and bars, food and beverage stores, gas stations, and convenience stores. Fuel and other related supplies constitute about 33% of total expenditures. They are followed by food expenditures which are just under another 33% of all expenses. Sporting goods and other retail equipment spending account for a further 14%, with overnight accommodation an additional 8%.

In addition, non-trip recreation spending can be attributed to the recreational opportunities in the Delta. In particular, the recreation impact analysis considers boat dealer and boat storage business revenues in the Delta.

This analysis updates the establishment-level micro data estimates and survey of boat storage facilities from the 2012 ESP. The previous estimated boat sales and services was adjusted for inflation using the producer price index for the ship and boat building industry,⁵⁷ then the change from 2010 to 2018 in dealer vessel registrations for the five-county Delta region was used to adjust for sales.⁵⁸ With a 12% increase from inflation and a 56% decrease in dealer vessel registrations, annual boat sales are estimated to be \$21.4 million. In addition, the analysis estimates revenues associated with boat storage using the consumer price index to account for inflation and the change from 2010 to 2018 in pleasure vessel registrations in the

⁵⁷ U.S. Bureau of Labor Statistics, Producer Price Index by Industry: Ship and Boat Building [PCU3366133661], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/PCU3366133661>, August 16, 2020.

⁵⁸ California State Parks, Division of Boating and Waterways, Vessel Registration – All Craft, retrieved from https://dbw.parks.ca.gov/?page_id=29371, August 16, 2020.

five-county Delta region to adjust for vessel storage demand.⁵⁹ With a 13.7% increase from inflation and a 12.8% decrease in pleasure vessel registrations, boat storage revenues are estimated at \$16.9 million per year in the Delta. In total, the analysis estimates current non-trip recreation spending in the Delta at about \$38.3 million annually.

Combining trip-related and non-trip recreation spending in the Delta, the analysis estimates current annual direct spending on Delta recreation is approximately \$250.9 million. Table 8-23 maps the \$212.6 million in Trip Related spending and Table 8-24 maps the \$38.3 million in Non-Trip Related spending into more specific expenditure categories that are used for the economic impact analysis with IMPLAN.

Table 8 - 24 Estimated Annual Direct Delta Trip Related Recreation Spending by IMPLAN Sectors

IMPLAN Sector	Trip Related Spending
Retail - Food and beverage stores	\$38,448,000
Retail - Gasoline stores	\$71,288,000
Retail Stores - Sporting goods, hobby, book and music	\$8,098,000
Retail - General merchandise stores	\$21,069,000
Other amusement and recreation industries (i.e., marinas)	\$24,313,000
Hotels and motels, including casino hotels	\$9,896,000
Other accommodations	\$7,768,000
Full-service restaurants	\$14,522,000
Limited-service restaurants	\$15,442,000
All other food and drinking places	\$1,792,000
Total Trip Related Spending	\$213,636,000

Table 8 - 25 Estimated Annual Direct Delta Non-Trip Related Recreation Spending by IMPLAN Sectors

IMPLAN Sector	Non-Trip Related Spending
Retail - Motor vehicle and parts (i.e., boat dealers)	\$21,412,000
Other amusement and recreation industries (i.e., marinas)	\$16,854,000
Total Trip Related Spending	\$38,265,000

Table 8-25 summarizes the annual economic impact of trip related recreation and Table 8-26 summarizes the economic impact of non-trip related recreation on the five-county Delta region as modeled with IMPLAN. Table 8-27 reports the total trip and non-trip economic impacts.

In total, Delta recreation and tourism supports about 2,280 jobs in the region including nearly 460 in restaurants and bars, 90 in hotels and motels, and 700 jobs at marinas. These jobs provide about \$98 million in annual labor income, and a total of \$144 million in value added to

⁵⁹ U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CUUS0000SA0]. For vessel registration data, see previous footnote.

the regional economy. Based on a geospatial analysis of job location in the Delta, it appears that most of these jobs are in the secondary zone.

Table 8 - 26 Economic Impact of Trip Related Recreation and Tourism on Five Delta Counties

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,360	\$52,339,000	\$71,418,000	\$113,029,000
Indirect Effect	210	\$13,071,000	\$20,615,000	\$37,562,000
Induced Effect	270	\$14,808,000	\$28,173,000	\$45,785,000
Total Effect	1,850	\$80,118,000	\$120,206,000	\$196,376,000

Table 8 - 27 Economic Impact of Non-Trip Related Recreation & Tourism on Five Delta Counties

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	320	\$11,722,000	\$13,870,000	\$22,168,000
Indirect Effect	40	\$2,513,000	\$4,173,000	\$7,763,000
Induced Effect	60	\$3,226,000	\$6,140,000	\$9,978,000
Total Effect	420	\$17,460,000	\$24,184,000	\$39,908,000

Table 8 - 28 Total Economic Impact of Delta Recreation & Tourism on Five Delta Counties

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	1,690	\$63,961,000	\$85,288,000	\$135,197,000
Indirect Effect	260	\$15,583,000	\$24,789,000	\$45,324,000
Induced Effect	330	\$18,034,000	\$34,313,000	\$55,763,000
Total Effect	2,280	\$97,579,000	\$144,390,000	\$236,284,000

Table 8-28 shows the statewide impacts of annual trip related Delta recreation and tourism. Similarly, Table 8-29 shows the statewide impacts of annual non-trip related Delta recreation and tourism, and Table 8-30 shows the total, trip and non-trip, impacts. For these impacts, an additional \$172.2 million in annual recreation-related spending outside the Delta was estimated for supplies and travel. Statewide, Delta recreation and tourism supported over 3,780 jobs and \$280 million in value added.

Table 8 - 29 Economic Impact of Trip-Related Recreation and Tourism on California

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	2,300	\$98,344,000	\$132,721,000	\$203,238,000
Indirect Effect	410	\$29,752,000	\$47,716,000	\$82,943,000
Induced Effect	630	\$38,626,000	\$71,168,000	\$114,487,000
Total Effect	3,340	\$166,722,000	\$251,605,000	\$400,669,000

Table 8 - 30 Economic Impact of Non-Trip Related Recreation & Tourism on California

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	320	\$11,927,000	\$14,037,000	\$22,168,000
Indirect Effect	50	\$3,309,000	\$5,504,000	\$9,616,000
Induced Effect	70	\$4,595,000	\$8,472,000	\$13,629,000

Total Effect	440	\$19,832,000	\$28,013,000	\$45,413,000
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Table 8 - 31 Total Economic Impact of Delta Recreation & Tourism on California

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	2,620	\$110,271,000	\$146,758,000	\$225,406,000
Indirect Effect	450	\$33,061,000	\$53,220,000	\$92,559,000
Induced Effect	700	\$43,222,000	\$79,641,000	\$128,116,000
Total Effect	3,780	\$186,554,000	\$279,619,000	\$446,082,000

The updated \$212 million in annual trip related recreation spending on the Five Delta Counties is 18% lower than the \$251 million that the 2012 ESP estimated. As discussed previously, the reduction in estimated total trip spending is due to improved data and relatively flat visitation levels over the past decade. The estimate of non-trip spending has also decreased due to reduced new and continuing boat registrations in the region. Economic impacts associated with these direct expenditures have also changed.

Given that 65% of trip related spending was in the retail sector, the portion of retail sales that remain with the local retailer and support local retail jobs is a significant component of associated economic impacts. This portion of sales, also known as the retail margin, has declined in recent years, leaving local retailers with a smaller portion of the expenditures and less local economic impact per dollar of retail spending. This declining retail margin is a national trend, as the number of retail jobs has not grown as fast as retail spending increases in recent years. In 2020, the \$251 million in trip and non-trip expenditures equates to just \$135 million in local direct economic output, 54% of total visitor expenditures. For comparison, the 2012 ESP estimated \$312 million in trip and non-trip expenditures which translated into \$192 million in direct economic output, 62% of total trip expenditures.

The employment impact of Delta recreation and tourism has also declined as a result of these changes. We estimate a total of 2,280 jobs in the Five Delta Counties, a 26% decrease from the estimate of 3,064 jobs in the 2012 ESP. The decrease to the statewide employment impact is even larger, from 5,317 in the 2012 ESP to 3,780 in this report.

While other economic multipliers and linkages also changed during this period, the combination of declining trip and non-trip related recreation spending with declining retail margins accounts for the majority of the decrease in recreational related economic impacts compared to the 2012 ESP.

8.3.7 Trends

The current status in Delta recreation shows a place of diverse recreation experiences, with approximately 12 million annual visitors, having an economic impact on the region of over \$250 million. Yet, this recreation mecca is also suffering from economic conditions, physical and operational constraints, pressures on water supply, regulations that restrict development, and other internal and external issues. These trends will affect the Delta’s future recreation potential.

One way of estimating recreation use over the next 50 years is to look back in time. Fifty years ago (1970s), people engaged in virtually all the recreation activities they now enjoy. User survey

data exists going back a little over 60 years. There are approximately 35 different outdoor recreation activities identified by CA State Parks with data collected nearly every five years over the 60-year period. Most of the activities track their growth with population, but some are decreasing in percentage of the total, while others have increased.

As discussed previously, the one factor that is relatively constant is the percentage breakdown between the three broad clusters of recreation activities: resource-related, urban parks-related, and right-of-way/tourism-related, i.e., 20 percent (16-23 percent) of activities take place in urban developed parks and golf courses; 50 percent (48-58 percent) are right-of-way related, including jogging, walking, bicycling, and driving for pleasure; and the remaining 30 percent (25-30 percent) occur in resource-related areas including state and national parks, forest service lands, nature areas, reservoirs, and rivers. These percentages have remained relatively constant over time, regardless of demographic changes. Another rather constant factor to consider is that approximately 70-80 percent of the total recreation use is simple, close to home, and with very little expenditure required for special equipment.

Therefore, it is anticipated that the outdoor recreation uses we find today will still exist, that the predominance of the activities will be simple, close to home, and require little expenditures, and that around 20 percent of the use will be developed urban park-related, 50 percent right-of-way-related, and 30 percent resource-related. The 2060 projections from Outdoor Recreation Trends and Futures support this likelihood.

The Delta may likely become even more important for these types of uses because the populations that encircle it are expanding. Elsewhere, close-by outdoor recreation opportunities are rapidly disappearing. But the combination of land use protections, flood vulnerability, and rich agriculture land provide the likelihood that the Delta will remain relatively unchanged in coming years.

In the Delta, the present uses are highly related to the availability and condition of private facilities. Most of the boating and fishing activities rely upon private marinas, even though the activities occur on public waterways. Most of the hunting in the Delta also occurs at private hunting clubs. Most Delta tourist destinations are related to wineries, farm stands, and commercial establishments in the Legacy Communities.

Developed, publicly owned resource-related recreation areas in the Delta are still quite limited, when compared to other areas in the State. Most public lands are nature and wildlife reserves, supporting nature study and birdwatching and, in some cases, hunting, but their public access facilities are either secondary to their mission or still primarily in the planning stages. They appear to have capacity to accommodate increased use over time. Some urban parks have been developed along the edges of the Delta, primarily in Stockton. Both publicly and privately owned historic and cultural sites exist throughout the Delta, though most are small and have limited hours.

Another way to look at trends is through latent (i.e., unmet) demand revealed by survey data. State Parks survey data reports on latent demand by activity category.⁶⁰ The following activities were found by State Parks to be the top ten activities that adults would like to participate in more often:

1. Picnicking in picnic areas
2. Walking for fitness or pleasure
3. Camping in developed sites
4. Beach activities (swimming, sunbathing, surf play, wading, etc.)
5. Swimming in a pool
6. Day-hiking on un-paved trails
7. Attending outdoor cultural events
8. Visiting outdoor nature museums, zoos, gardens, or arboretums
9. Shopping at a farmer's market
10. Visiting historic or cultural sites

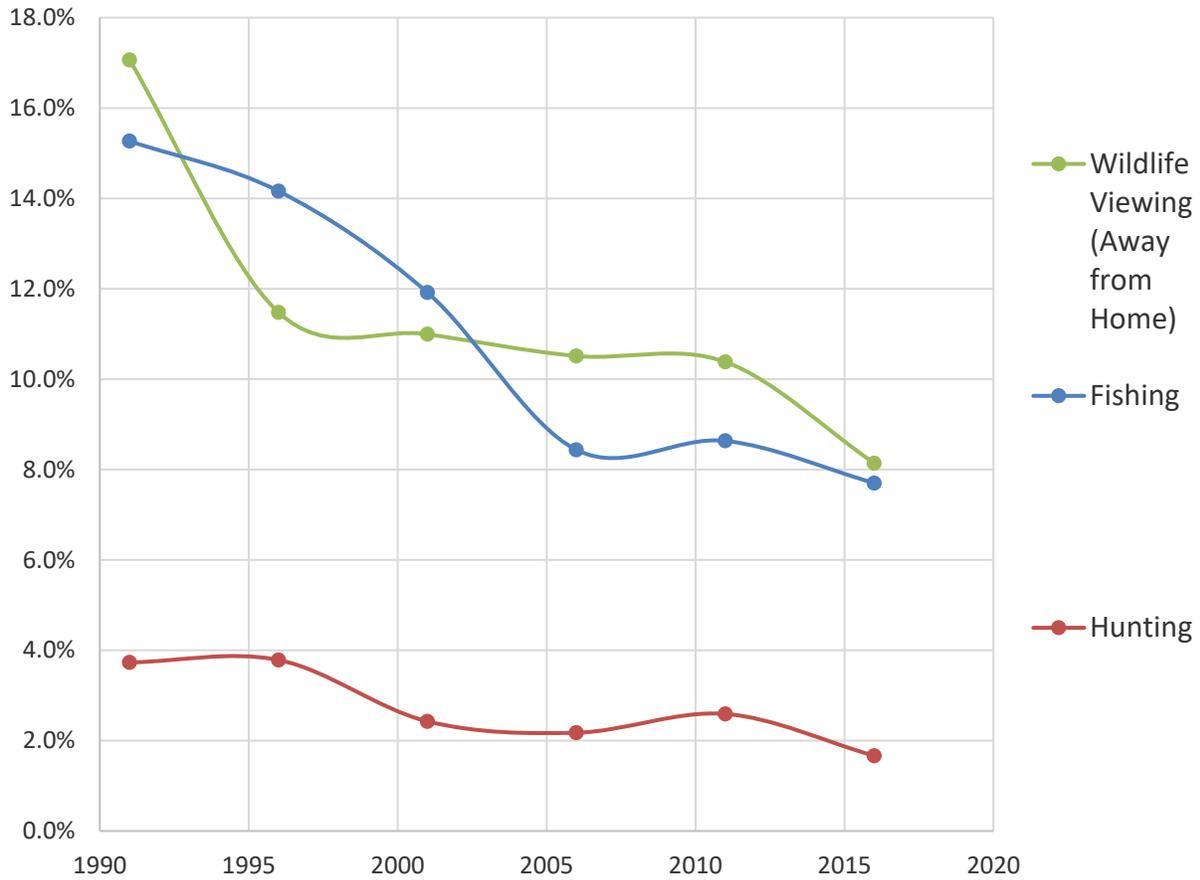
The top four activities, and nine of the top ten take place in the Delta and represent an opportunity for growing visitation, if facilities were available and attractive, especially camping and beach facilities.

USFWS reported on trends since 1991 in fishing, hunting, and wildlife viewing, as shown in Figure 8-5 below. Overall, the fishing participation rate has declined 50 percent since 1991, while hunting has declined 55 percent and away-from-home wildlife watching down 50 percent.⁶¹ These data represent a trend away from traditional outdoor recreation (i.e., hunting and fishing).

⁶⁰ State Parks 2012, p. 28

⁶¹ USFWS 2016

Figure 8 - 5 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation Participation Trends in the Pacific Region 1991-2016

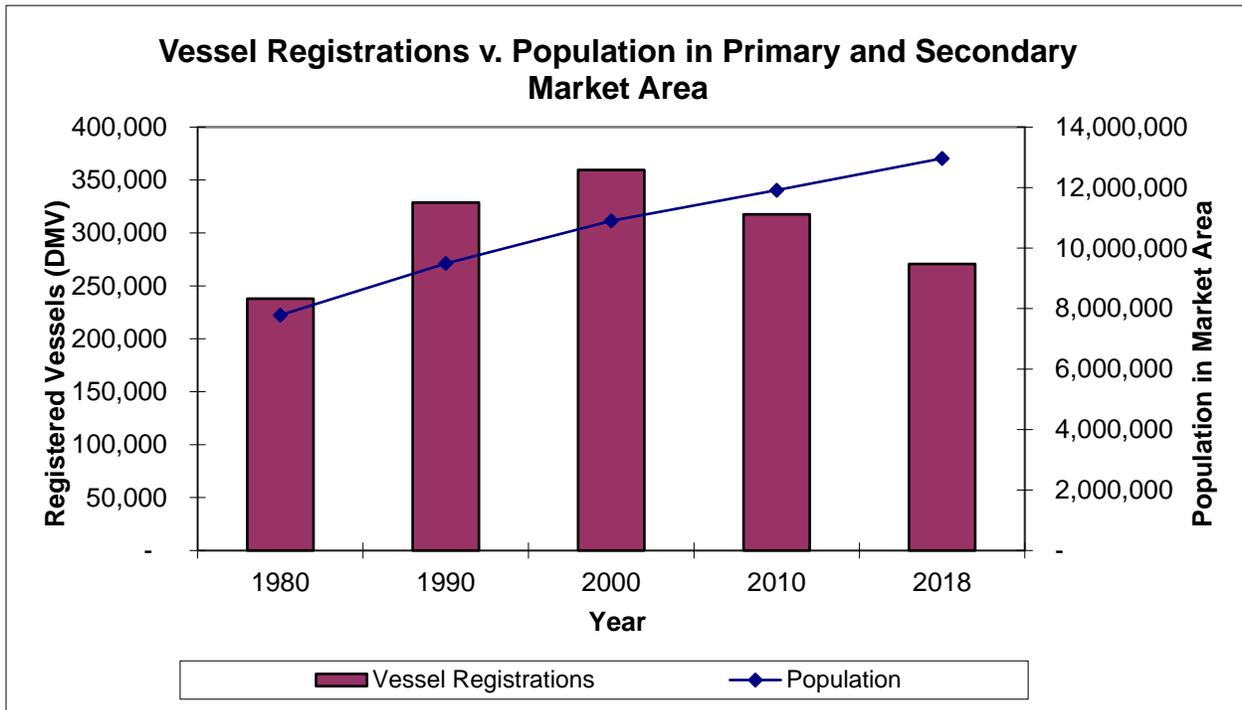


Source: U.S. Department of the Interior, USFWS, and U.S. Department of Commerce, U.S. Census Bureau. 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

Section 8.3.4.2 above highlighted current (2018) boat registration numbers. Vessel registrations are down substantially since 2000 both statewide and in the Primary and Secondary Market Areas. In 2000, vessel registrations were at their highest of 902,447 statewide, and 359,541 in the Market Area, compared to 2018 numbers of 670,102 statewide and 270,713 in the Market Area. These numbers represent a decrease of 25 percent statewide and 24 percent in the Market Area. In the 2012 ESP it was unclear if the 2010 number represented a trend or was a decline due to the 2008 to 2009 recession. The numbers from 2018 seem to indicate a definite downward trend in boat ownership both statewide and within the Market Area. Figure 8-6 below shows boat registrations versus population over the past approximately 50 years in the Market Area. The BNA also reports on this declining trend, concluding that “additional motorized boating growth will not be experienced over the next few years”.⁶²

⁶² Mickel et al. 2018, Volume III, p. 61

Figure 8 - 6 Vessel Registration v. Population in Primary and Secondary Market Area, 1980-2018

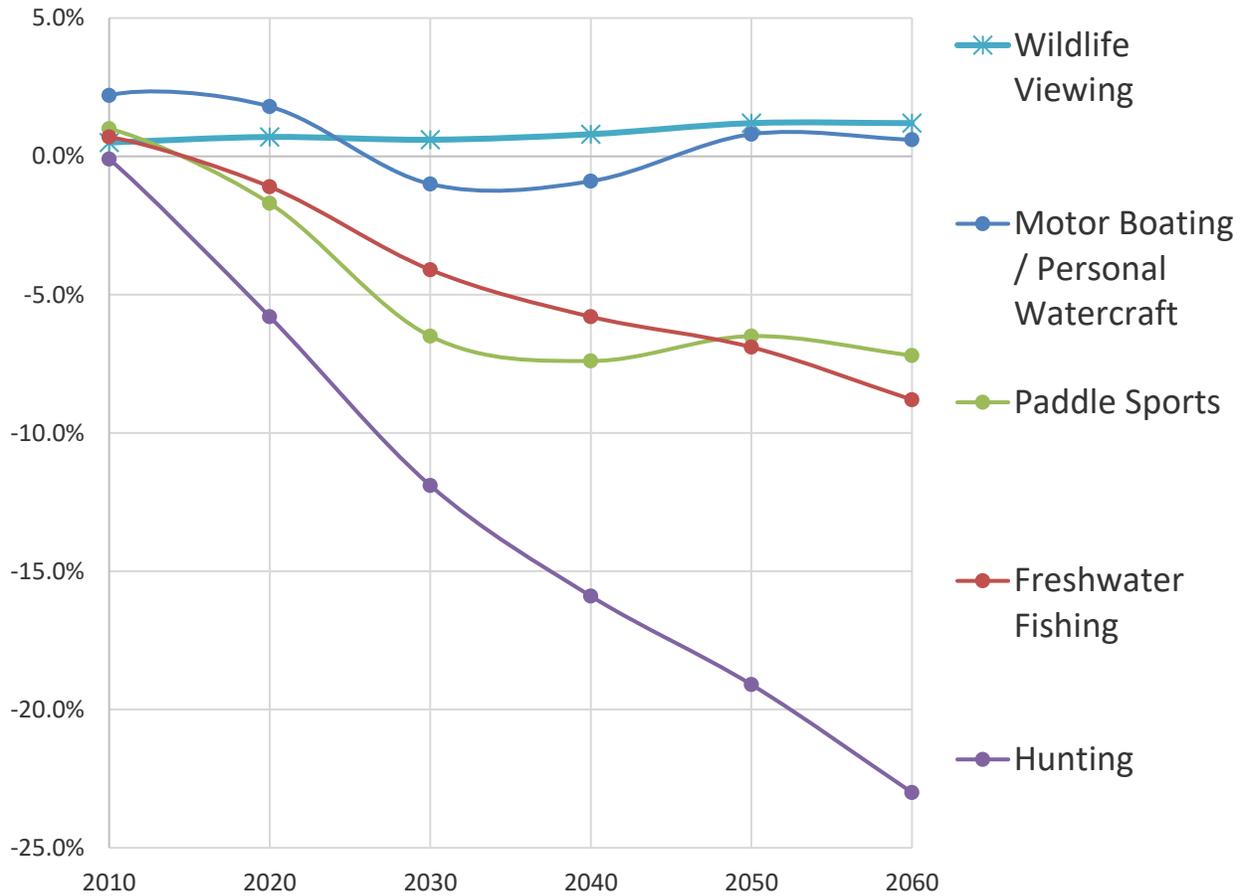


While boat registrations were increasing at a faster pace than population growth through the 1980s, they have increased at a slower pace than population growth since then, and as mentioned above, have decreased overall since 2000. As boating is the dominant recreational activity in the Delta, these trends indicate that motorized and sail boating may not keep pace with population growth over the next 50 years.

Trends in non-motorized boating, however, seem to counter those of motorized boating. The statewide BNA reported that non-motorized watercraft participation is increasing for most types of watercraft since 2006, with stand-up paddling and kayaking growing fastest, including both recreational kayaking and kayak fishing.⁶³ However, these trends are not predicted to last over the next 40-year horizon, as shown in Figure 8-7.

⁶³ Mickel et. al 2018, Volume III, p. 62-70

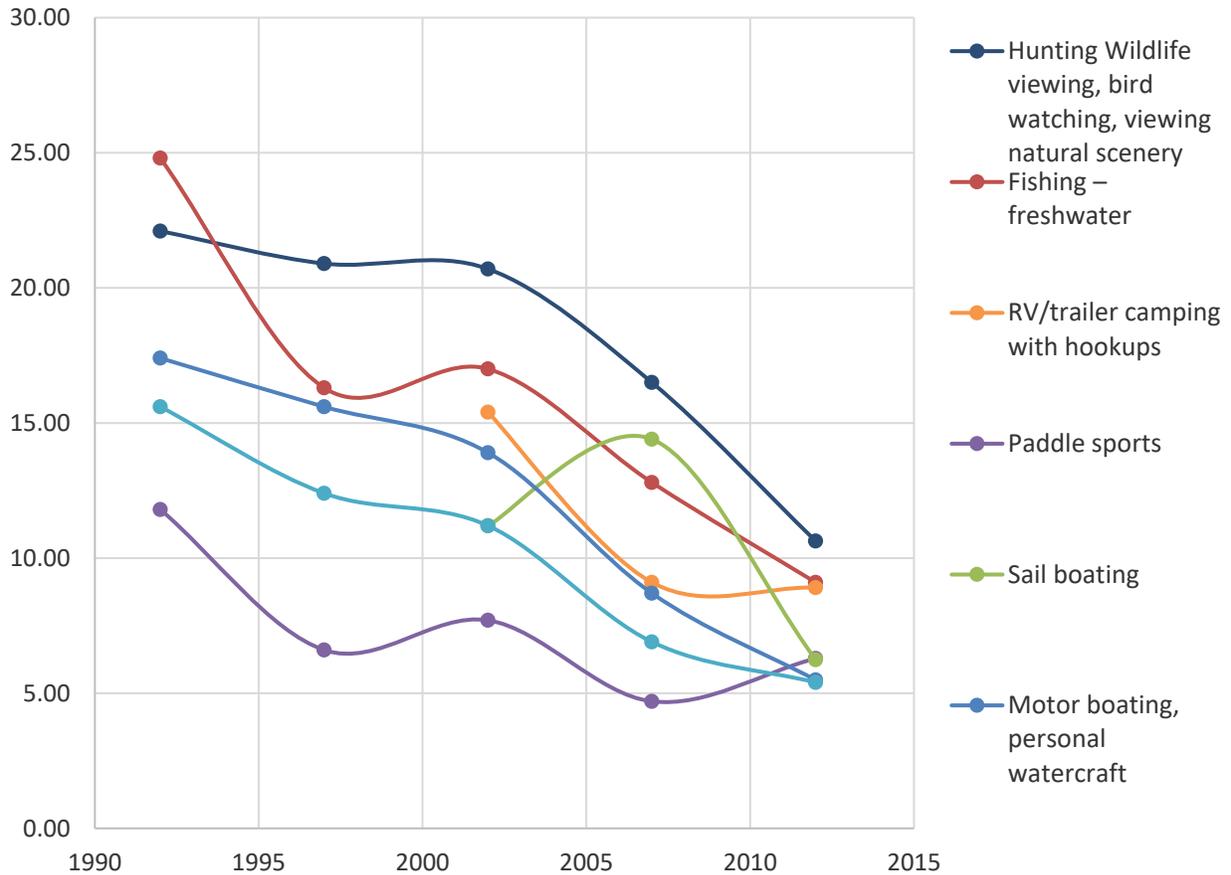
Figure 8 - 7 Long-Run Projections of Change in Recreation Participation Rates



Source: Cordell, Ken H. *Outdoor Recreation Trends and Futures A Technical Document Supporting the Forest Service 2010 RPA Assessment and EPS*

In addition to predicted declines in the number of people participating in an activity, trends in the number of days any person engages in that activity are also showing declines. Figure 8-8 shows the trends in Activity Days for various outdoor recreation from 1990 to 2012 based on surveys conducted by State Parks. All activities that are common in the Delta are showing declines since 1990.

Figure 8 - 8 Survey on Public Opinions and Attitudes on Outdoor Recreation in California Activity Day Trends (1991-2012)



Source: California State Parks, Natural Resources Agency, State of California. Survey on Public Opinions and Attitudes on Outdoor Recreation in California 2012 and EPS.

There are a number of other significant external or societal trends that could affect the present recreation use and demand over the next 50 years, some of which have been previously discussed in Sections 8.3, 8.4, and 8.5.

- Changes related to water conveyance, including increased conveyance related structures and changes to water flow.
- Climate change, sea level rise, and changes to weather patterns, flooding, salinity, and water flow.
- Physical changes to the Delta related to habitat restoration.
- Increasing population and development growth surrounding the Delta, with associated changes in demographics.
- Increasing population seeking out various forms of outdoor resource-related recreation.
- An increasing interest in agritourism and wineries.
- Increasing interest in youth access to meaningful natural experiences.
- Health concerns, such as diabetes and obesity, and the need for more exercise activities.
- Continued decline and stagnation of existing facilities without new capital investments.

- Younger generations tending to recreate differently, focusing on group experiences and shared ownership.

While some of these trends could result in increases in recreation participation, others indicate negative effects. They may cancel each other out. However, stacked together, trends seem to point towards decreases in Delta recreation and tourism participation, unless actions are taken.

8.3.8 Current Status and Trends Key Findings

- The Sacramento-San Joaquin Delta supports a diversity of recreation experiences, ranging from boating on open water or through winding tree-covered channels, to hunting, wildlife viewing, biking or driving winding levee roads, studying local California history, or tasting award-winning local wines and locally grown produce.
- Recreation is integral to the Delta, complementing its multiple resources and contributing to the economic vitality of the region. Residents and visitors recreate in the Delta every day, generating a total of roughly 12 million visitor days of use annually and a direct economic impact of more than two hundred million dollars in spending per year.
- Over the past 30 or more years, federal, state, regional, and local parks departments' budgets have been shrinking while costs have been increasing. The public spaces in the Delta have also seen the impacts of this reduced funding as parks have been closed or partially closed (Delta Meadows and Windy Cove⁶⁴), turned over to an outside concessionaire (Brannan Island), vandalized (DFW wildlife areas and others) or simply seen less maintenance or staff (Franks Track and others).
- The number of marinas in the Delta has decreased since 2008, from 112 to 97 in 2020. Likewise, there has been a decline in recreation-related establishments located in the primary zone, from 96 in 2008 to 70 in 2020. The number of boat builders in the Delta has dropped by 50%, along with drops in most other boating related businesses.
- The number of farms with direct sale operations, such as farm stands or you-pick operations, agritourism or recreation sales, have increased in the six Delta Counties since 2002, with resultant increases in income per farm. In addition, many wineries and wine-tasting establishments have opened.
- Several physical and operational constraints have an impact on current facilities and recreation access. These include sediment accumulation, invasive aquatic vegetation, waterway obstructions, water quality, lack of boat-in destinations, highly sensitive habitat areas, user group conflicts, no single management entity, regulations, homelessness and crime, and other issues.
- Focus groups conducted for this update echoed many of the same issues identified above but also called the Delta a hidden gem, with easy access to natural areas, and suggested that visitation can be increased without changing its character. The ideas they

⁶⁴ Though closed for a number of years after the 2008 to 2009 recession, it was re-opened again by State Parks a few years ago.

offered to improve visitation, beyond addressing current issues, included increasing business networking, marketing, and programming, developing youth ambassador programs, and adding new businesses and public access facilities.

- The majority of visitors are from Northern California and form the focal market for Delta recreation growth opportunities in the future. The total Market Area had a population estimate of approximately 13.1 million in 2020, with projections to grow to 16 million by 2060. Since 2012, the population in the market area is estimated to have increased by approximately 1,200,000 or 10%.
- Recreation visitation for 2020 was updated with recent data, but is estimated to be similar to 2010 estimates; approximately 8 million *resource-related* (e.g., boating and fishing) visitor days of use per year, 2 million *urban parks-related* (e.g., golf, picnic, and turf sports), and 2 million *right-of-way-related* (e.g., bicycling and driving for pleasure) recreation visitors per year.
- Since no direct surveys exist, the total number of activity days was estimated based on best available data and professional judgment at approximately 12 million/year, similar to 2010.⁶⁵ The increased market area population offset declining participation rates.
- Current direct spending in the Delta region from *resource-related* and *right-of-way/tourism-related* trips and related non-trip spending is estimated at roughly \$250 million inside the Delta (in 2020 dollars), as compared to approximately \$312 million in 2012, a decline of almost 20 percent.⁶⁶ Most spending occurs within Legacy Communities and at marinas.
- Delta recreation and tourism now supports almost 2,300 jobs in the five Delta counties, compared to approximately 3,000 jobs in 2012 (a 26% decrease). These jobs provide about \$98 million in labor income, and a total of \$144 million in value added to the regional economy. These numbers are lower than the estimates from 2012 when, Delta jobs provided about \$104 million in labor income and \$175 million in value added.
- Delta recreation and tourism supports about 3,800 jobs across all of California, a decline of 28% of the estimated 5,300 statewide jobs in 2012. The sector contributes about \$280 million in value added, compared to approximately \$350 million in 2012, a decline of 20% .
- The main reasons for the decreases in spending are twofold: 1) the estimate of average daily spending decreased due to more precise data, and 2) most recreation spending currently is retail related, lowering the economic impact multiplier. A higher level of spending on boats built in the Delta, for example, would increase the economic impact.
- The principal changes and trends that could affect the present recreation use and demand over the next 10-50 years are decreasing participation in fishing, boating, and hunting, decreasing boating registrations, physical changes to the Delta due to water conveyance management changes and rising sea levels, and ongoing decline of both

⁶⁵ Estimates are based on limited available updated data combined with professional judgment.

⁶⁶ The analysis states impact estimates in nominal dollars. The decline in spending between 2012 and 2020 in inflation-adjusted dollars is nearly 30 percent.

public and private recreation facilities. Positive trends include increasing population and development growth and increasing agritourism and wineries.

8.4 Outcomes and Strategies

The prior section discussed the current status of recreation in the Delta, including describing existing facilities, estimating existing visitation and economic impacts, and updating numbers from 2012. There was a short discussion on current trends, a review of various studies and reports, and a summary of focus groups held as part of this project, all of which inform the following section.

Overall, there have been both positive and negative changes and influences affecting the Delta recreation economy over the past eight to ten years. There seems to be little change in recreation activity, with some activities such as boating possibly declining. At the same time, visits to wineries and farm stands are up. Programs to assist and maintain Delta recreation and tourism are moving forward. There are bright spots, including the Delta National Heritage Area designation, planning on the Great Delta Trail, the VisitCADelta.com website, and other programs through the Commission and the Conservancy. However, these programs are not enough to support the vast web of businesses that drive the Delta's recreation and tourism economy. In spite of the economic expansion prior to the COVID-19 pandemic, several marinas closed, and many businesses left the primary zone.

This section first focuses on the existing issues and threats that are impacting and challenging the sustainability of the Delta's recreation and tourism economy, synthesizing information presented in prior chapters with a focus on the greatest recreation economy drivers and threats. Trends and other information that may influence the future of the Delta as an evolving place are then discussed.

The proposed responses and recommendations will bring together two topic areas — constraints/issues and influences on the Delta as an evolving place — as a means of determining how the Delta might progress over time. Proposed solutions will be presented in three groupings:

1. Organizational and structural impediments in need of correction in order to prepare for long term growth.
2. High priority issues that are negatively impacting key economic drivers.
3. A plan/vision for that future growth.

Principles, goals, and physical strategies are then applied to develop the proposed recreation plan. The separation of issues and needs between existing conditions and future potential is meant to assist in the prioritization of activities towards existing problems.

8.4.1 Issues and Constraints

Several existing physical and operational items were described in Sections 8.3.2 and 8.3.3 above. Those that would have the most significant impacts on future economic scenarios are expanded below, including:

- Operations and Maintenance of Existing Facilities
- Water Quality Concerns
- Law Enforcement/Safety

- Private Marina Limitations
- Other Facility Limitations
- Limited Access
- Boating Conflicts
- Waterway Concerns
- Regulatory Environment
- No Distinct Delta Identity or Management Entity

There are many different recreation activities that take place in the Delta, as previously described. Five of those activities make up the preponderance of all the economic activity:

- Motorized boating
- Tourist and retail activity within the Legacy Communities
- Fishing, including tournament fishing
- Hunting
- Visiting wineries and agricultural tourism

This section focuses on the existing needs and current and future potential constraints and issues that will shape recreation potential of these primary economic drivers in the Delta.

8.4.1.1 Operations and Maintenance of Existing Facilities

Over the past 30 or more years, federal, state, regional, and local parks departments' budgets have been shrinking while costs have been increasing. As a result, park systems throughout California face a backlog of billions of dollars of deferred operations and maintenance. The public spaces in the Delta have also seen the impacts of this reduced funding as parks have been closed or partially closed (Delta Meadows and Windy Point), turned over to an outside concessionaire (Brannan Island), vandalized (DFW wildlife areas and others) or simply seen less maintenance or staff (Franks Track and others).

Shortage of funding is partially responsible for public agencies declining operation and maintenance of the most important public asset of the Delta – the waterways themselves. These funding shortages have resulted in less than ideal aquatic weed control, snag removal, and dredging and silt removal. There is also a backlog in removing abandoned vessels, which reportedly have proliferated over the years. DBW has distributed over \$5 million in grant funds to Delta counties under their Surrendered and Abandoned Vessel Exchange program since 2012. However, these funds have not kept up with the magnitude of the problem.

Private facilities also have maintenance backlogs, with marinas reporting needs for dredging, replacing docks, upgrading fuel and pump outs and other facilities. Prior to the pandemic, several marinas indicated they had plans for investment, mostly in expanding boat storage.

Along with parks and recreation facilities, some of the roads in the Delta have also fallen into disrepair or become too small for the existing use. Caltrans too has an operation and maintenance backlog, but more importantly, Delta levee roads were not built or designed for commuter traffic or for both bikes and automobiles and non-levee roads are often on unstable soils and subject to subsidence.

8.4.1.2 Water Quality Concerns

Water quality concerns, both real and perceived, are the most frequently cited issues for many boaters and shoreline users in the Delta. With limited clarity and concern over water quality, some are deterred from engaging in water contact in the Delta, or even visiting the Delta. Many boat owners avoid saline water, and saltwater intrusion affects the boating experience, use, and economic potential.

The Delta Plan has focused on improving Delta water quality for both within-Delta uses, as well as for exports. The policies and regulations in the plan have caused Sacramento and Stockton to improve the quality of their wastewater exports, and there is more focus on agricultural discharges. DBW has spent millions of dollars cleaning invasive aquatic vegetation and some parts of the Delta are reporting some success in control. As these programs continue, recreationalists may continue to have perceptions of poor Delta water quality, if they are unaware of the positive changes.

8.4.1.3 Law Enforcement/Safety

Along with parks budgets, public safety budgets have been cut at all levels of government. These cuts have affected law enforcement patrol – both marine and land based – in the Delta. In most of the Delta, outside of state or federal lands, the counties’ sheriffs’ patrols are first responders. However, marine patrol budgets are cut such that most counties are wholly dependent on DBW safety grants for funding. Since 2012, DBW has granted only a total of \$1.7 million to the Delta counties and cities for boating safety enforcement.

In addition, CA State Parks ranger positions have been cut and patrols are infrequent. There are no rangers at Brannan Island State Recreation Area since its operations have been outsourced to a concessionaire, and law enforcement is dependent on the Sacramento County Sheriff’s Office.

In addition, the growing homeless population within the State has severely impacted the Delta due in part to its remoteness and hidden areas, with homeless moving into abandoned vessels or living adjacent to the waterways. In addition to the visual and environmental nuisance, residents and visitors report safety concerns. Local governments do not have the resources to address these issues.

8.4.1.4 Private Marina Limitations

Most boat access to Delta waterways is provided through private marinas and boat launch ramps and state and local public launch facilities are limited. There are relatively few opportunities for overnight stays for boaters without self-contained facilities outside of marinas. Over the years, the private marina market has adjusted to provide for the demand for boat storage slip space, which is the primary revenue source for marina operators. Launch ramps and parking space for trailered boats is available in limited supply at marinas as boat launch fees generally are not a significant revenue source and land for day-use parking is limited landside of the levees.

Marinas face siltation of their boat basins, and costs and regulatory hurdles to maintenance are significant. Many marinas and resorts are aging and suffer from deferred maintenance, diminishing their appeal to new users.

A further limiting factor to increased use by visitors trailering boats to the Delta is its “hidden” quality. Boat put-in locations are often not easily seen and must be sought out by the first-time visitor. Many facilities are located in out-of-the-way locations. Further, given the limited spaces many marinas occupy, with parking and roadways built atop narrow levees, launching and parking maneuvers can be challenging, even for experienced operators. Boating use has tended to be primarily day-use, which limits economic activity generated by boaters.

8.4.1.5 Public Facility Limitations

Declining public recreation budgets have contributed to declining maintenance and facility quality and no schedule for expanded development. State and local agencies have developed multiple plans for expanding Delta recreation that have remained unfunded for many years. The most recent plan by State Parks, *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*, states that no funding is available for implementation and the largest State Park in the Delta, Brannan Island State Recreation Area, is currently operated by a private concessionaire. Delta Meadows State Park remains closed. Since 2011, when it was published, a very limited number of the proposals in the State Parks proposal have been implemented.

8.4.1.6 Limited Landside Access

Some private marinas/resorts offer camping and day-use facilities. However, resorts of this kind are limited, revenue potential is also limited, and operations are at a tight margin. In addition, some resorts are becoming long-term housing solutions both for the economically disadvantaged, and for those seeking the simple lifestyle of tiny houses. While this addresses a housing need, it reduces the availability of overnight visitor accommodations.

Similarly, there are relatively few landside public recreation facilities that offer fishing, camping, or picnicking, and overnight hospitality options are relatively few. Visitors have complained about the lack of facilities in survey after survey, looking for public restrooms or places to safely park to access levees or waterways. With few communities, parks, trails, and public destinations, the vast land area for the most part is accessible only through the windshield.

8.4.1.7 Boating Conflicts

Boating use occurs on public waterways that abut, for the most part, privately-owned agricultural or residential property. It is the inclination of boaters to occasionally beach their boats or tie up to private docks and access the shoreline, which can result in trespass and potential damage to private property, especially since legal public shoreline access in the Delta is almost non-existent. Due to the rural, widespread nature of the Delta, trespass on private property can go unnoticed for days. While trespass can oftentimes be innocuous boaters trying to stretch their legs, it can also lead to theft, vandalism, or trashing of private property.

In addition to conflicts with landowners, boaters have reported conflicts with other boaters. Non-motorized boaters, especially, have reported increased conflicts with motorized boaters, as well as PWC operators.

8.4.1.8 Waterway Concerns

An additional constraint to expanded boating use in the Delta is its geography. By nature, the Delta's labyrinth of waterways is part of its uniqueness and charm, but the lack of obvious navigational landmarks, the boater unfamiliar with it can easily become lost. Although use of GPS devices reduces this risk, many inexperienced boaters continue to be reluctant to tackle Delta navigation.

Boat wakes can damage levees. Levees, subject to erosion, are often lined with riprap, which discourages landing by boaters and precludes shoreline recreation use other than incidental bank fishing by landside fishermen. The resulting environment allows for boat passage but virtually no shoreline recreation use in these areas, a significant deterrent to expanded boating use. Aesthetic values of unvegetated riprap levees are low, further diminishing their appeal.

Similarly, Delta waterways can be unpredictable in depth and contain unseen underwater hazards that can discourage the uninitiated boater. Snags, sandbars, uncontrolled aquatic vegetation, and submerged levees are common hazards that can catch the casual boater.

8.4.1.9 Regulatory Environment

While most local jurisdictions, including counties and cities, have policies that encourage recreation in the Delta, they also have regulations that preclude or severely limit new development or services, or redevelopment of existing facilities. So, while protecting the character of the Delta as an evolving place, these same policies also inhibit economic growth and sustainability.

Additionally, several state and federal agencies have regulatory authority over changes to Delta facilities. The effects are felt from businesses in Legacy Communities to isolated wineries to marinas and other public and private recreation facilities. For instance, permits for a new marina or even a marina upgrade may require input from the local county, DBW, the Commission, the CSLC, Reclamation District or other LMA, DFW, Regional Water Quality Control Board, USACE, CVFPB, USFWS, and National Marine Fisheries Service. FEMA floodplain regulations have also discouraged additional development in flood zones. These many layers of regulations are, at best, costly, time consuming, and confusing, and, at worst, completely prohibitive to new recreation developments or enhancements.

8.4.1.10 No Distinct Delta Identity or Management Entity

The Delta lacks a marketing identity and an operational or management entity. Unlike a known brand like "Monterey," "Delta" is broad, incohesive and diverse. Lacking a strong identifying focal point area, like Fisherman's Wharf or the Monterey Bay Aquarium, it almost defies brand recognition. Delta newcomers don't know where to go or what to do when they get there.

Because the legal Delta covers six different counties and several incorporated cities, there is no one leadership entity or authority. Visitors and residents alike wonder "who is in charge?". Although the State has designated three different agencies with specific responsibilities for the Delta, each of these agencies has limited authority or share their authority with local jurisdictions. The Council is responsible for implementation of the Delta Plan, which has policies and recommendations related to recreation and tourism for other agencies, but limited funding

and the regulatory authority it wields is more focused on the complex co-equal goals of water supply reliability and ecosystem restoration rather than recreation. The Commission is focused on enhancing the Delta as an evolving place but is primarily a planning and advisory agency, with even more limited staff and financial resources. The Conservancy is primarily focused on conservation of natural habitats, with some responsibility for economic enhancement through grant-making. CA State Parks has authority for its lands in the Delta, but as described earlier, has limited resources and has been unable to open some park lands or has had to lease out park land to a concessionaire rather than close the park. Local governments are responsible for their specific jurisdictions' recreational needs, and have capital outlay funds, but regional coordination is limited. A notable exception is the East Bay Regional Park District, which has had much success as a special district authority with dedicated funding. However, it only covers part of the Delta, and operation and maintenance funds for their Delta facilities must compete with the needs throughout their system. Since multiple agencies are responsible for different management and operational aspects, no one is "in charge". Without a leader to play the role of champion, enhancing the recreation and tourism economy of the Delta is not any public agency's top priority.

For all its beauty, allure, and recreational diversity, the Delta functions as a largely underutilized under-appreciated and thus under-protected destination, unknown to many in the larger Sacramento and Bay areas and the State, and not easily discoverable to those who do not already know and use the area.

8.4.2 Influences Summary

As growth in the region and the State continues over the coming decades, the Delta has the potential to emerge as a recreation resource of increasing value and appeal. Increasing recreation demand can combine with the growing popularity of agritourism and locally grown food and wine to reinforce the identity of the Delta as a unique and desirable recreation destination for the northern California region.

The ESP is charged with working within the context of the Delta as an evolving place. The existing baseline conditions, as well as its constraints and issues, will affect that evolution. The following key opportunities and influences will also help shape that future.

8.4.2.1 *Changing Population Demographics*

By 2060, population in the counties surrounding the Delta is projected to grow by about 20 percent, a much lower growth projection than envisioned in the 2012 ESP. However, this population will not reflect the current population, but will see increasing racial and ethnic diversity. In addition, as the generations age, their recreational preferences will change. The boat owning population tends to be older and Caucasian. As this population ages out of boating, the millennial generation is aging into spending more money on recreation. However, this generation recreates differently, with a larger focus on group experiences and shared ownership, or rental rather than ownership.

These population shifts may increase demand for more tours, rentals, and agritourism experiences, in turn creating demand for expanded overnight visits to Legacy Communities and

the growing wine region. Recreation, wildlife viewing, agritourism, enhanced by the opportunities provided by the new Delta National Heritage Area will likely grow together, fueling the interest in the Delta and reinforcing its emerging identity as “Place”. A synergy between these uses will potentially create new opportunities for visitation and economic activity in the Delta.

8.4.2.2 Public Lands

Nearly all public lands that have been acquired in recent years within the Delta have been set aside as wildlife habitat but provide little or no public recreation use or access. There have been several recent studies (Sloop et. al 2018, Milligan and Kraus-Polk 2016) arguing for increasing appropriate public use that would be compatible with habitat management objectives.

Fully funding implementation of agency recreation plans, such as State Parks’ *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh* or *Franks Tract Futures*, would provide a significant expansion of access and facilities that could also boost recreation use.

8.4.2.3 Delta as an Evolving Place

The Delta needs to be a better-defined destination for visitors. Multiple surveys of actual and potential visitors to the Delta identify the need for more information about places, events, and activities within the Delta. As a result, the Commission and the Conservancy, with Council funding support, launched the VisitCADelta.com website and developed the Delta Marketing Task Force. Both these efforts are little known by existing Delta visitors and business owners and should be better supported to allow expansion and improve coordination with private sector businesses to increase their impact.

The Delta as an evolving place identity will surely be elevated through the Delta National Heritage Area planning and implementation activities, as well as the further development of the Great Delta Trail and designation of additional local trail segments. Both efforts would also be enhanced by identifying and establishing Gateways and edges to the Delta that reinforce its unique landscape character, particularly along the primary east-west highway corridors.

8.4.2.4 Market Area Development

Projected population growth within communities on the edge of the Delta may likely create additional demand for some types of recreation offerings. Communities such as Rio Vista, Tracy, Lathrop, and Bethel Island have oriented development towards the Delta, interconnecting recreation corridors on the periphery of the Delta. In addition, other areas of the secondary zone continue to urbanize, with more housing and commercial development, such as the Delta Shores project in Sacramento County.

Some of these developments will likely increase demand for outdoor recreation turning towards the Delta. Other developments, such as Delta Coves on Bethel Island, may lead to changes in recreation providers. Since each home in this development will have their own dock, few residents will require marina boat storage services, but instead will require and utilize more transient docks, refueling, boat-in restaurants, and other day use facilities.

8.4.2.5 Agriculture Trends

Evolutions occurring in agriculture include increased planting in wine grapes, a growing interest in developing a coordinated “farm trails” effort with the goal of increasing agritourism and direct sale of agriculture products, and the desire to brand Delta agriculture products. Wineries continue to expand within the Delta, and agritourism receipts are increasing within Delta counties.

8.4.2.6 Recreation Activity Trends

Recreation use patterns continue to evolve. Basic recreation activities are generally constant, but trends occur within the activity. Participation in non-motorized boating is increasing at a faster rate than motorized, while motorized boating ownership is declining. Younger millennials tend to focus on experiences, group recreation, and shared ownership. Other trends involve the provision of high-end camping, and water recreation-oriented urban redevelopment and development centers.

During the current pandemic, however, there are widespread stories of expanded demand for outdoor recreation, including hiking, boating, fishing, and camping. It is unknown whether this spike in demand will continue post-pandemic.

8.4.2.7 Coequal Goals and Risk Management

The efforts and ultimate implementation to meet the coequal goals of protecting, restoring, and enhancing the Delta ecosystem and creating a reliable water supply will influence future recreation developments and activities in the Delta. The State of California is on its third program since 2008 to ensure water supply reliability – from Isolated Conveyance and BDCP, to CA WaterFix, and now to Delta Conveyance Project. The implementation of any isolated conveyance project will alter the Delta in many ways that are still unknown despite the active design efforts now underway. It is currently uncertain how the project will look during the long construction period and upon completion, although the general outlines are quickly coming into focus. Much more uncertain is if and what recreation components it may have.

8.4.2.8 Climate Change

The Council and others have ongoing studies of potential concerns related to climate change, including land subsidence, rising seas, altered hydrology, changing precipitation patterns and health effects of all these on the infrastructure and people of the Delta. For example, potential impacts to the Delta include more saline intrusion related to changing ecosystem and increased marina maintenance. Water level rise will impact levee integrity, as well as the safety of those businesses on and protected by the levees. The complexities of these topics mean that specific predictions are unknown, but it is known that they will influence the future of recreation and tourism in the Delta. The Council’s Delta Adapts (formerly Climate Change and Vulnerability Assessment) report will be completed and released in all probability concurrent with this ESP update, so it may not be possible to incorporate the findings here.

8.4.3 Potential Responsive Actions

The strategy for sustaining the recreation and tourism economy for the Delta will be shaped by potential responses to existing constraints and issues, in addition to future influences. In the past, various federal, state, and local agencies, as well as nonprofit and for-profit entities have each contributed pieces of the total recreation picture in a haphazard, uncoordinated fashion. Fundamentally, this is due to the fact there is no single coordinating or governing entity for the Delta. For example, CA State Parks, in its *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*⁶⁷ lays out suggested actions for the various State agencies involved in the Delta. It also speaks to the need for both itself and other State agencies to partner with local agencies, nonprofits, and private businesses. However, the Proposal does not specifically address issues with private lands or businesses or potential public-private partnerships, and little progress has been made on its implementation.

8.4.3.1 Prior Recommendations

Prior to discussing the recommendations of this report, an overview of recommendations previously made by many different studies to enhance recreation and tourism in the Delta is presented. Section 8.3 above summarized information from these studies about current status and trends, including numerous policy recommendations for various aspects of recreation and tourism⁶⁸. Note that these recommendations include multiple complex and overlapping issues, only some of which are the purview of the Commission.

These recommendations, from the 2012 ESP, the Delta Plan and other plans, to the focus groups⁶⁹ that were held as part of this project, can be summarized and grouped into six general categories.

1. Facilities, both existing and new
2. Water quality needs, enhancement, and protection
3. Information/Marketing
4. Programming
5. Safety
6. Legislation

Detailed recommendation in each category are presented below. Appendix H contains charts detailing recommendations and the source of the recommendation.

1. Facilities
 - A. Increase operations and maintenance of existing areas

⁶⁷ State Parks 2011

⁶⁸ Studies that were reviewed for these recommendations include DBW 2002, DPC 2006, CDPR 2011, ESP 2012, Augustineldeas 2014, Conservancy/DPC 2014, Mickel et. al 2017, Mickel et. al 2018, Sloop et. al 2018, Mickel et. al 2019, THG 2020, Biegert et al. (undated), and others.

⁶⁹ Focus Group recommendations are summarized in Section 8.3.4.4

- Rehabilitate and expand access to State Parks in the Delta, including Delta Meadows, Brannan Island, Franks Tract
 - Upgrade and rehabilitate existing facilities, both public and private
 - Restore/clean up derelict buildings in Legacy Communities
 - Improve roads
 - Launch clean-up programs
- B. Expand and develop new public facilities and support existing private businesses
- Expand public bathrooms, trash facilities, and add parking
 - Expand water access facilities
 - Implement the Great Delta Trail
 - Establish bike lanes
 - Establish hiking trails
 - Establish water trails
 - Explore recreation at Cache Slough
 - Increase access to Twitchell and Sherman Islands
 - Add facilities at Mossdale/Vernalis
 - Expand Delta Meadows and Locke Boarding House
 - Develop Barker Slough, Elkhorn Basin, Wright-Elmwood Tract, South Delta
 - Add facilities at Clifton Court Forebay
 - Incorporate public access to restoration projects
 - Improve private amenities (more restaurants, hotels, shops, services, etc.)
2. Water Quality Needs, Enhancement, and Protection
- Enhance water quality for swimming and other recreation
 - Reduce sewage contamination from wastewater and homeless
 - Remove abandoned vessels and derelict boats
 - Control and remove invasive aquatic vegetation
 - Remove navigation hazards, snags, and debris
3. Information/Marketing
- Expand Delta-wide marketing
 - Create one overall information reference for all things Delta
 - Create and install better signage for trails, roads, wayfaring, boundaries, and private property
 - Create and distribute pamphlets, maps, and/or develop information kiosks
 - Improve interpretation at wildlife areas and ecological reserves
4. Programming
- Increase annual events and festivals
 - Encourage group usage and competitions (e.g. running, fishing, biking)
 - Form more business partnerships and promotions
 - Create Youth Ambassador programs
 - Develop and manage NHA

- Enhance agritourism
5. Safety
- Increased boater education
 - Increased law enforcement marine patrols and other law enforcement presence
 - Increase DBW grants
 - Make roads safer for driving and biking
6. Legislative
- Increased funding for Delta recreation and tourism – develop and fund Delta Improvement Fund
 - Refine regulations for appropriate recreation/tourism related development in Legacy Communities
 - Streamline regulations and permits for dredging and hazard removal at marinas and adjacent waterways

Summary

Most of these recommendations, some dating back more than 50 years, have not been implemented. This lack of action has been due to a number of factors, most of which have been discussed previously, including:

1. No single responsible entity for Delta recreation and tourism
2. Limited funding, and existing resources directed to other priorities
3. Regulatory complexity

This plan endeavors to include the recommendations that have the possibility of being implemented within the next ten years and that will lay the foundation for potential future growth. Before any real progress can be made, however, the current issues affecting the Delta recreation and tourist economy must be addressed. To accomplish such an effort, the Delta needs an entity with responsibility and authority to take the lead on solving these issues.

8.4.3.2 Delta Organizational Complexities

In the Delta, there is no organization “in charge” of recreation and tourism; instead there are a multiplicity of agencies - federal, state, counties, districts, and cities. In addition to multiple agencies, there are multiple activities and interests. There are traditional recreation activities, such as boating, fishing, and hunting, but operated by both public agencies and private enterprise. There are both land and water habitat preservation and restoration to consider along with appropriate access and interpretation. There is active agriculture production in need of protection, as well as tourism-related sales through wineries and farm stands. All these, in turn, need to function in coordination with the large interests of both local and statewide water needs and programs. Forming a vision, developing a plan, and taking actions to sustain recreation and tourism in the Delta, with all its multiple elements and challenges, is a totally unique undertaking. However, throughout California are examples of agency coordination or public/private partnerships in planning, developing, and operating complex regional recreation and/or tourism areas.

One of the most successful and easily understood examples of creating a recreation destination in California is the Monterey Old Fisherman’s Wharf which, in a small area, attracts in excess of six million visitors annually. It is a merger of public and private efforts wherein agencies created a synergistic setting for private enterprise. The city built the wharf, marina infrastructure, parking lots, and access roads, DBW provided marina development loans, and State Parks contributed an adjacent visitor center and historic building restorations.⁷⁰ The private sector created and operates the restaurants and shops along with providing fishing, whale watching, and other recreation activities. The Fisherman’s Wharf Association helps to coordinate and market the wharf. State Parks continues to operate Monterey State Historic Park, a collection of historic houses and buildings, with interpretation, educational programs, and special events support from the nonprofit Monterey State Historic Park Association.^{71,72}

California Tahoe Conservancy’s work is a good example of performing multiple functions within, and for, multiple levels of agencies. It operates within and in support of a National Forest and in two states, three counties and multiple incorporated and unincorporated communities. Its functions include planning, acquiring, restoring, and developing trails and lake access points, holding and managing land, and preserving and restoring critical habitat. It provides grants to cities and partner organizations for appropriate projects in the areas of water quality, forest improvement, recreation and public access, land management, and livable communities. It assists to create settings for private enterprise. Its overarching mission is to help protect and restore water clarity within Lake Tahoe. As part of that role, it has also done extensive curb and gutter and bank restoration work along the roadways in the Tahoe basin.

The Santa Monica Mountains Conservancy (SMMC) also operates within multiple jurisdictions and cooperates with all levels of government, providing planning, coordination, and execution functions. Its unique difference is that it also functions through nine separate Joint-Powers Authorities (JPAs). Through these entities it is able to assist in the provision of all of the functions authorized to the partnering entity. For instance, the Mountains Recreation and Conservation Authority (MRCA) is a JPA between SMMC and the Conejo and Rancho Simi Recreation and Park Districts. MRCA owns or manages more than 75,000 acres of parkland, trails, ocean access and event centers and provides operations, ranger services, fire protection, and environmental education. The Desert and Mountain Conservation Authority (DMCA) is another JPA between SMMC and the Antelope Valley Resource Conservation District (AVRCD). The DMCA was established to identify, acquire, and manage open space lands within the boundaries of the two founding agencies for long term conservation benefits.

The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) is another example of a JPA. It was established in 1986 to address coastal erosion, beach nourishment, and clean oceans. Member agencies include the Counties of Santa Barbara and Ventura, and the Cities of Santa Barbara, Goleta, Carpinteria, Ventura, Oxnard, and Port Hueneme. It works in close

⁷⁰ <http://montereywharf.com/index.php?page=history>

⁷¹ http://www.parks.ca.gov/default.asp?page_id=575

⁷² <https://www.mshpa.org>

coordination with parks, planning, and public works departments of member agencies on specific high priority projects. Its funding comes from annual agency membership dues and grants.

None of these example agencies have been created to solely protect and cooperate with agriculture nor to create settings for private enterprise. Private enterprise is both the existing and future driver of economic sustainability in the Delta, but its future success level can be shaped by the public facility contributions and regulatory environment. This plan recommends developing a synergistic response between state and local agencies, nonprofits, and the private sector. It is strongly recommended that a facilitator organization be identified or developed to lead implementation efforts, and coordinate and stimulate funding for vital actions.

8.4.3.3 Responsible Entity

One of the individuals interviewed as part of the focus groups asked a simple question about Delta recreation, “Who is responsible for it?”. The answer, as discussed above, is needlessly complex. It is partially due to this complexity that implementation of any recreation enhancements is slow or non-existent. No single agency or entity has ultimate single purpose, recreation coordination and execution authority. The Commission is primarily a planning, advisory, and regulatory agency. The Conservancy’s prime focus is on conservation and habitat restoration. The Council is supposed to implement the co-equal goals, while protecting and enhancing the Delta as a Place. However, the majority of its resources go towards water conveyance, conservation, and science. None of the three State Delta agencies have the regulatory authority to implement the recommendations made over the past 50 years. CA State Parks has a focus on recreation throughout the State, but not tourism or agricultural tourism, and has been under-funded for years. Until one entity, such as a joint powers authority, is responsible for coordinating a vision and action plan and then advocating and implementing enhancements to Delta recreation, there is little reason to expect that the Delta recreation economy will change.

The 2012 ESP recommended that for best outcomes, a facilitator organization should be identified that could coordinate community priorities in the Delta and then take action, solving major problems related to recreation, tourism, and economic development of the Legacy Communities (see ESP pages 267-272). Since that time, in the absence of such a facilitator organization, those problems have persisted and worsened, and the recreation and tourism economy in the Delta has stagnated. It is again recommended that a facilitating entity should be designated or established.

The Delta is continuing a slow decline as a recreation and tourist destination. The existing structure of multiple agencies is not currently organized towards active solutions. If it is the priority of the State to promote and encourage the economic sustainability of the Delta, there is the need for a unified, equitably balanced, development plan to accomplish existing and future facility developments. There is also the need for an entity capable of performing the development, and where appropriate, long term operation and maintenance of those future facilities.

In recognition of the need to deal with existing problems, as well as recognizing the complexities of establishing a facilitator organization, in the interim an immediate solution would be to establish processes to proactively coordinate the multiple entities and diverse interests found in the Delta. In the past, the Commission consulted with a citizens and agency recreation advisory committee to develop coordinated solutions to specific issues. Re-instituting such a body with the specific purpose of stimulating concerted action on existing problems could be a substantial step in the right direction.

The primary interests that the advisory committee could focus on are:

1. Developing a coordinated and streamlined permitting process for silt removal in channels and marinas, companion with coordinating mitigation for such projects.
2. Stimulating concerted action on major chronic issues, including aquatic weed and snag control, homelessness, and policing and boating safety.
3. Coordinating marketing and promotion, including encouraging and supporting special events.

In addition, the advisory committee could begin work on determining the best solution to designating or creating a facilitator organization. It should consider the needs and desires of multiple state and federal agencies, each of the counties and Legacy Communities, agriculture, environmental interests, and private enterprise recreation providers. Recognition and support will need to be given to the inherent public/private interrelationships currently providing recreation in the Delta.

Ideally, a responsive, *Delta-focused* public recreation, planning, development, and management facilitator organization is vital to the implementation of the ESP. To be effective, this organization needs an assured funding source that can be relied upon for both development and operation, should represent needs of multiple cities and counties, and have the ability to coordinate multiple state and federal agencies.

Since nearly all recreation opportunities in the Delta are provided by private enterprise and are dependent on basic public investments in roadways, levees, and other infrastructure improvements, investment in synergistic recreation improvements can expand services to the public while creating settings for additional or expanded private facilities. Such coordinated action will be important in facilitating actions within Legacy Communities and edge communities, as well as with dispersed recreation points throughout the Delta.

Ideally, a facilitator organization would be responsible for:

1. Developing and executing a comprehensive, coordinated vision and plan for recreation in the Delta.
2. Managing and operating public recreation facilities, as well as providing or coordinating policing and public safety.
3. Coordinating marketing and promotion of the Delta, including operating or supporting additional special events.
4. Coordinating streamlined permitting processes for multiple functions from silt removal in channels and marinas to upgrading Legacy Community structures.

There are no existing entities in California that provide these functions, however, using some examples described above in Section 8.4.3.2 as models, there are potentially three alternatives for structuring an entity to handle these multiple functions. They are:

1. Create an entirely new agency with the legislative authority to perform all of the necessary functions.
2. Empower and charge an existing agency, such as the Commission or the Conservancy, with new authorities and functions.
3. Charge an existing entity such as the Commission, the Conservancy, CA State Parks, or others, to enter into a JPA or JEPA with a willing agency or agencies, such as the Delta counties' or a regional parks and recreation departments, that have the existing authorities to perform recommended planning, development, and operation actions.

In order to function, all three of the alternatives will require additional funding, potentially provided through the State budgeting process, or through member agencies of a JPA.

Additionally, the following questions will need to be studied and answered:

1. How easy is it to establish such an organization?
2. How many types of partners are needed and what is their willingness to enter into an arrangement?
3. Are potential partners' leadership, staff, and governing boards compatible and adaptable?
4. What is the capability of the entity to embrace and equally treat the various components and interests in the Delta, including not only the variety of recreation activities but also agriculture, Legacy Communities, public private partnerships, and habitat protection and restoration?
5. What type of structure would the public, the Legislature, and other agencies support?

It is suggested that the Commission should approach CNRA leadership to study the possible formation of such an entity or form an advisory committee to do so. As the Delta Reform Act already created additional public agencies in the Delta, recommending a fourth public agency could be unwelcome by the Legislature, the public, and the existing agencies. Instead, for both ease of establishment and flexibility of functions, we recommend that the Commission or the Conservancy enter into a Joint Powers Authority agreement with other agencies that already have the authorities to implement recreation and tourism enhancements. A Joint Powers entity is a public agency created pursuant to the Joint Exercise of Powers Act that allows two or more government agencies to combine forces by jointly exercising their powers with respect to a specific purpose or set of objectives.

The Santa Monica Mountains Conservancy (SMMC) can stand as an example of a state agency that has successfully implemented JPAs to the advantage of recreation and tourism in its areas. The JPA could be formed with the Commission and/or the Conservancy, a regional park district such as East Bay Regional Park District, State Parks, and/or one or more of the Delta counties or cities. Their mission would be to plan and implement the recreation and tourism enhancements to sustain Delta as a Place, as called for the Delta Reform Act. This topic was discussed in more detail in Section 11.1 of the 2012 ESP. This update again strongly recommends that the creation of such an entity or extension of legislative authority of an existing organization be explored.

8.4.3.4 *Strategies for High Priority Issues*

Once organizational impediments are alleviated, there are a number of key strategies that should be utilized in order to assist in the implementation of the recommendations of the ESP. Priority should be given to actions that ameliorate existing issues and which can be accomplished within the next five to ten years.

Overall, the general recommendations from the 2012 ESP are mostly still valid and have been reconfirmed by many other reports and surveys since 2012, as well as by the focus groups conducted as part of this project as outlined in Section 8.3.4.4. This update will refocus those recommendations on existing issues. Once these issues are addressed, an overall Recreation Enhancement Plan for the Delta (detailed in Section 8.4.4 below) can be implemented incrementally, as opportunities present themselves and demand dictates.

It is noted that the Commission is not necessarily responsible for the implementation of these recommendations, however, it can lead, coordinate, and partner with responsible agencies to encourage implementation in order to meet its mission to sustain recreation's contributions to the Delta's economy. Recommended short term strategies and actions are described below.

Facility Needs

Multiple surveys over the past eight to ten years, as well as participants in the focus groups, have called for additional or upgraded facilities in the Delta. However, creating new facilities in the Delta is a lengthy, cumbersome process. For now, available resources should be focused on improving and expanding existing facilities. At a minimum, public restrooms and parking should be open and expanded. For example, restroom and parking facilities at the Locke Boarding House, the Jean H. Harvey Community Center, or other local public parks should be open to visitors during all daylight hours, for local visitors as well as tourists driving through. New signage should be placed on roadsides to make tourists aware of the availability of these amenities. Immediate funding should be provided to open Delta Meadows State Park and expand access and amenities at CDFW sites, such as Lower Sherman Island.

For private facilities, DBW can market the availability of low interest loans and grants and focus funding on Delta boating facilities. Many private businesses in Delta had, before the COVID-19 pandemic, plans for improvements or expansions.

Designating economic development staff that can offer planning and permitting assistance to private entrepreneurs in the Delta may help move private projects along quicker or attract projects that might otherwise be overwhelmed by the complexities of doing business in the Delta. Knowledgeable agencies could partner or offer staff time to city or county small business assistance services, focused on appropriate primary zone and Legacy Community small business investment.

Water Quality Concerns, Enhancement, and Protection

Various components of water quality in the Delta, including for drinking, swimming, agriculture, and habitat, have been ongoing issues for decades. The Council and DWR both have a number of programs focused on in-Delta and export water quality. The Cities of Sacramento and Stockton are converting their wastewater discharge to tertiary treatment. The Commission

should support these programs since any increases in water quality for drinking, habitat, or agriculture will also increase water quality for aquatic recreation.

In spite of the efforts and funding dedicated to improving water quality in the Delta, there is still the perception that it is bad. This perception is based on historical facts, as well as current issues, such as harmful algae blooms at Big Break and downtown Stockton or E. coli found in high quantities at public beaches upriver from the Delta, such as in the American River in Sacramento. Encouragingly, due to lengthy and ongoing efforts, these current issues tend to now be focused in specific locations rather than widespread throughout the Delta waterways.

In order to fight this perception, information about the improvements in water quality should be publicized more through media and direct outlets to park districts and private marinas. For instance, the San Francisco Estuary Project (SFEP) manages an education and monitoring program, “Save the Waters you Love”, aimed at encouraging boaters to use pump outs in the San Francisco Estuary and the Delta. Since many of the facilities in the Delta are connected to septic systems, they offer additional challenges than pump outs tied to urban wastewater systems. The project is partnering with DBW to reach out to Delta marinas to discuss challenges and opportunities⁷³. The Commission may consider partnering with SFEP to expand or publicize this existing program.

Floating and Submerged Aquatic Vegetation and abandoned vessels and other boating hazards continues to affect the Delta’s waterways. There should be a push for larger one-time funding to DBW for grants to local agencies to have a large dedicated clean-up effort throughout the Delta. Over the past eight years, DBW provided funding of approximately \$5 million to all the Delta counties for their Surrendered and Abandoned Vessel Exchange program. Counties could compile the cost for clean-up in their jurisdiction and lobby for one-time funding. A facilitator entity could coordinate with the counties and have a widely advertised dedicated program throughout the Delta, supported by marinas, and utilizing volunteers. In addition, increases to DBW’s FAV/SAV funding and programs need to focus on Delta waterways.

USACE approves the permits for dredging the Delta’s waterways. They had previously developed a draft Delta Dredged Sediment Long Term Management Strategy, but federal funding ended for that program in 2014. The Commission could work with its local and State agency partners to encourage USACE to restart and implement this program to streamline dredge permitting.

Information, Programming, and Promotion

The Commission is currently charged with developing the management plan for the Delta National Heritage Area, as well as the overall plan for the Great Delta Trail. Both of these efforts have the potential to bring new monies, new marketing, new facilities, and ultimately new tourists to the Delta. Both of these efforts could be prioritized with more staff and funding resources in order to speed up completion and adoption.

⁷³ <https://www.sfestuary.org/clean-vessel-act-grant-program/>

The Commission is also managing VisitCADelta.com and is partnering with the Conservancy on the Delta Marketing Task Force. Both of these efforts should also be prioritized.

VisitCADelta.com is the most comprehensive, unbiased website for the Delta visitor, but it is not widely known. Additional resources could go towards finding partner organizations and other ways to broaden the reach of this website. Additionally, the Delta Marketing Task Force has the ability to solve one of the recommendations of the focus group – that businesses work together more to cross promote and market services – if it can expand its outreach. The Delta Marketing Task Force could also expand its focus to increasing events and festivals in the Delta and establishing a young ambassador’s program.

As part of its planning mandate, the Commission should continue ongoing surveys of people who recreate in the Delta. Several updated surveys were completed over the past eight years that informed this plan. Yet, two areas that are lacking regard actual visitation counts and understanding the impact of hunting. The Commission could consider exploring new sampling methodologies to determine actual counts of people who recreate on the Delta’s waterways, perhaps by using aerial photo surveys or weekend counts at specific locations spread out over the year. In addition, estimates of the numbers of hunters who utilize the Delta, as well as the locations where they hunt, and how much money they spend would help complete the overall Delta recreation picture. Phone or other sampling surveys could be conducted, or the Commission could explore partnering with CDFW to survey hunters as they buy permits regarding preferred hunting locations, money spent hunting, numbers of hunting days, and other relevant topics.

Safety

An ongoing issue within the Delta is safety and law enforcement. The Commission may consider partnering with DBW, the Conservancy, and Delta counties and cities’ law enforcement agencies to form a working group to discuss, recommend, and implement ways to increase law enforcement presence and funding in the Delta, for both water and land.

DBW provides grants for Boating Safety Equipment and Enforcement. Since 2012, they provided \$1.7 million to Delta counties, helping fund marine patrols. However, more funding is necessary to have the desired amount of presence on the water to deal with boating conflicts, drunk boating, illegal discharges, and homeless issues. The above recommended law enforcement working group could champion such funding.

8.4.4 Recreation Enhancement

Once efforts regarding ongoing issues are moving forward, and a facilitator organization has been identified, designated or formed, and funded, then the Delta can truly focus on recreation enhancement projects. The enhancement plan that was originally developed in the 2012 ESP is still a valid recommended approach. That plan is described below.

8.4.4.1 Principles and Goals

The following principles and goals should be used to guide development of planning scenarios for future Delta recreation. These principles and goals were developed to minimize current

constraints and to take advantage of current and future opportunities. This Plan was developed with the following guidelines at the forefront.

- Recognize private enterprise’s primary role in providing recreation facilities and encourage and facilitate appropriate expansion to keep up with increasing population and changing demand.
- Recognize the multiplicity of public agencies and nonprofit entities which provide recreation in the Delta and encourage coordination in planning for, and provision of, recreation opportunities.
- Utilize State Parks Basecamp, Gateway, and Adventure concepts, as described in the *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*, which encourages the concentration of new facilities within and near existing recreation areas while developing and enhancing the attractiveness of points of interest in appropriate locations throughout the Delta.⁷⁴
- Promote the creation of recreation destinations as focal points of the Delta. Such multi-interest complexes should each highlight Delta values by incorporating one or more Legacy Communities, marina resorts, public and private recreation basecamp areas, natural wildlife areas, and trails. The complexes should be based upon existing community values and highlight existing Delta and community resources.
- Encourage the creation of settings for private enterprise development through the development of ancillary public facilities such as trails, event venues, community docks, etc.
- Respect and protect agriculture areas. Avoid locating recreation sites in areas that would create conflicts with agriculture and instead site, when possible, in more compatible areas such as around the edges of the Delta, in combination with Legacy Communities, and by expanding existing areas.
- Avoid developing recreation facilities within high flood risk areas or areas inaccessible during emergency flood events.
- Avoid conflicts with vital habitat resources.
- Respect and protect hunting activities by avoiding spatial and/or timing conflicts with other activities.
- Create positive park, open space, and trail edges that buffer the Delta and its important agricultural values from encroaching urban and suburban areas.
- Encourage both commercial and public recreation facilities—including marinas, food service, overnight accommodations, and standard community park developments—within or on the edge of Legacy Communities and existing recreation areas.
- Develop appropriate visitor-serving access facilities at wildlife areas providing nature study, bird-watching, and environmental education. Include interpretive signage to educate the public about the natural resources’ values of the Delta and their need for

⁷⁴ State Parks 2011

protection. In addition, consider, where appropriate, non-motorized boating access within or adjacent to such areas.

- Support programs to assist existing private recreation providers, such as identifying or providing loan funds, coordinating marina dredging and permitting, and helping them respond to impacts of climate change.
- Advocate for overnight extended stay within or adjacent to the Delta through program offerings, multiple points of interest, and available accommodations.
- Increase the public’s awareness of the Delta as a desirable recreation destination through better regional coordination, advertising and signage, marketing, and promotional-scale events.
- Identify and develop appropriate opportunities for small boat-in day-use areas, as well as larger destinations akin to Delta Meadows for boaters. Such areas should provide basic facilities, such as docks, tie-ups, restrooms, as well as opportunities to participate in many different forms of recreation.
- Develop appropriate locations throughout the Delta for a network of hard-surface non-motorized, multi-use trails, as well as boat trails for both motorized and non-motorized craft, including completing planning and implementation of the Great Delta Trail,⁷⁵ and trails recommendations from State Parks.⁷⁶
- Ensure appropriate and coordinated response to operational issues including invasive aquatic vegetation control, boater safety enforcement, waterway maintenance, abandoned and derelict boat removal, boating hazard control, etc.
- Provide additional onshore access facilities for shore fishing and motorized and non-motorized boat launching.

8.4.5 Recreation Enhancement Strategy Plan

8.4.5.1 *Basic Approach*

Planning Interrelationships

The Delta Plan provides recommendations for the Delta as an evolving place. Relative to this Economic Sustainability Plan, the Delta Plan recommends that “ways to encourage recreational investment along the key river corridors be identified.”⁷⁷ State Parks, in its recreation proposal for the Delta, looks at the Delta and Suisun Marsh as a whole, including State Recreation Areas, wildlife areas, and other state facilities. The scope of this Economic Sustainability Plan for recreation encompasses the entire Legal Delta, with a focus on the primary zone, but will also include Legacy Communities, marinas, agritourism, and other private enterprise activities. Ultimately, any refinements to a final recommended action plan need to be supported by both the recreation and resident community of the Delta.

⁷⁵ DPC 2010

⁷⁶ State Parks 2011

⁷⁷ DSC 2013

Components

State Parks' recreation proposal coordinates with and provides recommendations for each of the state agencies involved in various portions of the recreation sector in the Delta. It does not, however, provide recommendations for local agencies and private enterprises. Private enterprise presently constitutes nearly all of the economic activity related to recreation in the Delta. Therefore, this Plan examines all three sectors and the potential synergies between state agencies, local agencies, and the private sector.

Catalysts

A key strategy for achieving synergies between the public and private sectors is to plan for relationships wherein public agency facilities interrelate, complement, and create catalyst settings for private enterprise activities, while at the same time providing public services. These services can include both recreation facilities as well as vital infrastructure to support both public and private areas. Catalyst settings should be created whereby joint public-private efforts could support an expanding and diversifying menu of recreation and cultural attractions and events, as well as overnight accommodations, restaurants, retail, and other services.

Location

Concept locations for where catalyst settings, facilities, and activities could be accomplished are proposed below. The locations are primarily focused around the edges of the Delta and in and around Legacy Communities. These recommended locations are based upon the principles and goals previously discussed and consist of the following five concepts (See Figure 8-9).

1. Delta waterways
2. Dispersed, small points of interest and activity areas
3. Focal point destinations
4. Public access to existing and planned natural habitat areas
5. Delta-urban edges (the edges of existing and emerging urban areas that surround the Delta) such as Stockton, Tracy, Rio Vista, and Lathrop

Each concept and how it relates to influences and proposed locations is described in greater detail below.

8.4.5.2 *Delta Waterways*

The primary location for recreation in the Delta is, of course, the waterways. These waterways are diverse—narrow or wide, tree-lined or channelized, windy or quiet. Boaters have, over time, selected areas for their specialty activities such as windsurfing, waterskiing, cruising, paddling, etc. For instance, the waters flowing along the northwestern side of Sherman Island are a mecca to windsurfers and kiteboarders. Specialty needs are associated with most of these diverse activities.

The Delta Protection Commission's 2006 *Aquatic Recreation Component of the Delta Recreation Strategy Plan* is still very applicable. It recognized the existing use areas, access points, and marinas, and provided recommendations regarding their enhancement, refurbishment, and expansion. In addition, the report recommended three priority new enhancements.

It recommends that non-motorized boating trails be established in six different locations on waterways where habitat values are primary and where such use would not conflict with power-boating activities. A second recommendation is that major boat-to destinations, similar to Delta Meadows, be established in other parts of the Delta. The third recommendation was that smaller boat-in day-use areas with adequate facilities and transient tie-ups be established in appropriate locations throughout the Delta. Suggested elements and features for these areas, as well as location criteria, are provided within the report, but no specific locations are identified.

In addition, the report indicated the need for continued navigability of waterways, as well as providing new and expanded facilities in the future. These included more boat launching ramps, marina slips, boating support facilities, public access to waterways for anglers, and convenience docks related to Legacy Communities and points of interest.

The 2006 *Aquatic Recreation Component of the Delta Recreation Strategy Plan* predates the present, more comprehensive legislatively mandated Delta planning efforts. The above elements to the plan are still relevant and applicable, but some of the new influences on the Delta's evolution will require additional responses as related to Delta waterways recreation.

8.4.5.3 Dispersed Points of Interest and Activity Areas

The Delta's diverse points of interest and activity areas are dispersed throughout its vast landscape. These features grant the Delta a distinctive character, especially in contrast with both the surrounding urban and rural agriculture landscapes. These diverse points of interest—the small Legacy Communities, the loose network of marinas scattered throughout the area, the farm stands, wineries, and surrounding agricultural landscapes, winding waterways, and intriguing riparian landscapes—underscore the need to protect, enhance, and expand the elements that give the Delta its charm and sense of place. The sheer number and diversity of things to see and do is a valuable feature.

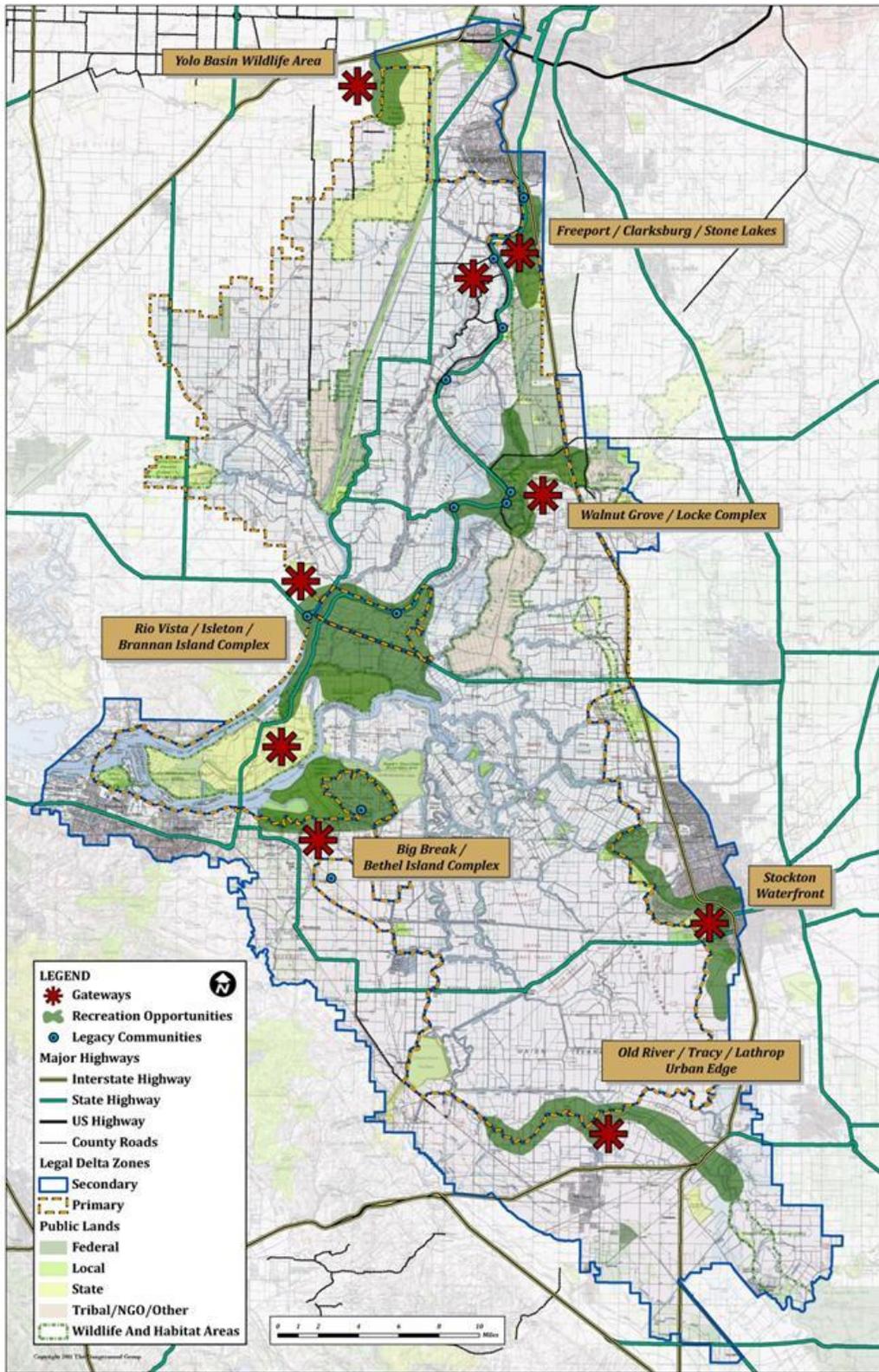
The expansion, over time, of additional areas will be accomplished primarily through private enterprise responding to opportunities such as farm markets, wineries, art galleries, restaurants, etc. On the public side, DWR identified in a past study⁷⁸ approximately 40 small day-use, launching, and fishing access locations that were economically viable, but which were never developed. State Parks has identified thirteen park and facilities expansions and development.⁷⁹ Federal, state, and nonprofit wildlife entities have planned facilities for increasing and managing public access and use. These studies should be revisited for ideas and projects which are appropriate under today's conditions.

Policies should be developed to encourage private development of additional appropriate facilities in non-conflicting locations and funding needs to be identified to accomplish appropriate public agency-planned improvements.

⁷⁸ DWR 1981

⁷⁹ State Parks 2011

Figure 8 - 9 Recreation Enhancement Strategy Plan



8.4.5.4 Focal Point Destinations

An important way to expand recreational capacity, increase visitor spending and lengths of stay, and draw new visitors to the Delta is to create destination complexes, similar to State Parks' Gateway-Basecamp-Adventure concepts.⁸⁰ By concentrating multiple recreation opportunities in an interconnected location, these complexes would provide focal points to visitors, particularly new visitors, and also present opportunities for businesses to develop economically viable operations. These complexes should include, and build upon, the primary values of the Delta so as to reflect a sense of the whole Delta to first time visitors.

Three locations have been identified that already have complexes with the combined values of natural areas, parks, Legacy Communities, marinas, historic features, and trail potentials. They are: (1) Walnut Grove/Locke/Cosumnes River Preserve, (2) Brannan Island/Rio Vista/Isleton, and (3) Bethel Island/Jersey Island/Big Break/Franks Tract. In addition, an emerging complex along the edges of Stockton also has the potential to be developed into a focal point destination.

The first focal point destination is proposed to include the Legacy Communities of Locke, Walnut Grove, Ryde, Courtland, and Hood, as well as Delta Meadows, the Cosumnes River Preserve, and Staten Island. Figure 8-10 below presents a conceptual drawing of proposed features⁸¹. Additional public facilities should include developed day-use and camping facilities at Delta Meadows, events venues, further improvements/restorations at Locke, and wildlife viewing/nature study opportunities. A network of water and land trails would knit together the complex and give it a sense of cohesion. A segment of the historic railway connection between Old Sacramento and the Delta could be used to foster the growth of critical mass at this complex, making it more attractive for investment. Chapter 10 in the 2012 ESP discusses some strategies for the Legacy Communities, but additional features and activities could be evaluated to assist in creating viable settings for private enterprise operations.

The Brannan Island/Rio Vista focal point destination complex is proposed to include Isleton, the Delta Farmer's Market, and the marina complex around the junction of the San Joaquin and Old Mokelumne Rivers. Possible habitat areas on Twitchell and Sherman Islands, the windsurfing oriented Sacramento County Regional Park on Sherman Island, and Brannan Island State Recreation Area could be knit together with the communities and marinas with a network of trails. Development of additional features to create settings for private enterprise should also be evaluated for this proposed destination complex.

The Bethel Island focal point would include its marinas and existing businesses, Franks Tract/Little Franks Tract, Big Break Regional Park, and a natural-lands conversion of Jersey Island. As with the other proposed complexes, these areas could potentially be tied together and enhanced with both landside and water trails.

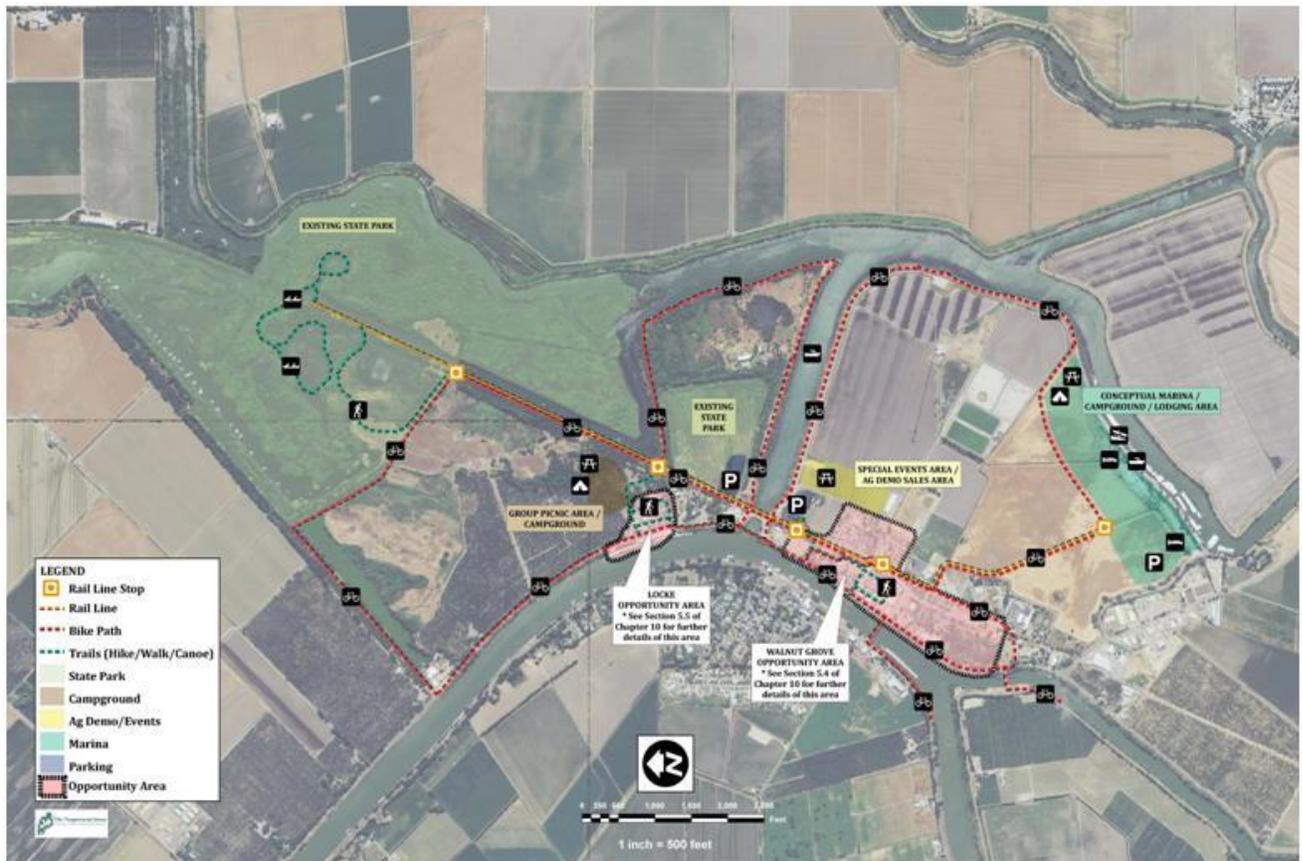
⁸⁰ State Parks 2011, p. 6

⁸¹ Figure 8-10 is taken from the 2012 ESP, p. 192

A suggested multi-purpose project has been developed for the Franks Tract/Little Franks Tract area. The proposed project is consistent with the implementation of State Parks general plan for the unit, which was developed and adopted in the 1980's. The project would not only enhance recreation in the area, but also controls sea water intrusion and provides important fishery habitat benefits. If developed, it would greatly add to the Bethel Island focal point and benefit local marinas and other recreation related businesses.

The proposed focal point along Stockton's edge has a different character and does not include a Legacy Community or a major natural landscape feature. The planning and emerging development for the area, however, create a Delta-related focal point area because the recent designation of the westerly portion of Wright-Elmwood Tract as open space and a possible State Recreation Area, in partnership with local agencies, provides the opportunity for additional park, trail, and habitat restoration improvements.

Figure 8 - 10 Conceptual Proposal for Walnut Grove/Locke/Delta Meadows Focal Point Complex



Source: 2012 ESP

8.4.5.5 Natural Habitat Areas

The fourth location-based recreation enhancement strategy is the association of appropriate visitor access to natural habitat areas with and on the edges of the Delta. Three existing natural habitat areas have the potential of providing expanded environmental education and nature-

appreciation opportunities: the Jepson Prairie/Calhoun Cut area at the head of Cache Creek, the Yolo Basin Wildlife Area east of Davis, and the Stone Lakes State Park and National Wildlife Refuge. These three natural habitat areas, in combination with the previously identified focal point areas, are important assets of the greater Delta. Other smaller areas of newly acquired or restored lands as part of the EcoRestore project may also be appropriate for managed public access. They all have the need for improved visitor access and interpretive facilities.

8.4.5.6 *Delta-Urban Edges*

The final location-based recreation enhancement strategy is the establishment of Delta-serving and urban recreation areas, as well as natural habitat zones, around the edges of the Delta. These should be located between the Delta and adjacent urban and urbanizing areas—from Stockton around to Antioch and Bethel Island, including the north edge of Tracy and Lathrop, and in selected locations such as Rio Vista. It is recommended that criteria be developed to assist in locating this interface zone (open space corridor) generally in conjunction with existing urban limit lines, in an area that would optimize its value for habitat enhancement with active park nodes and interconnecting trails.

8.4.6 Visitation and Economic Potential

A market demand-based model of visitation for current conditions was developed as a baseline in Section 8.3.5. This model is based on population, participation rates, activity days, and market capture rates. The same model can be used to predict visitation in the future, making adjustments to participation rates and market demand capture rates based on assumptions discussed above, as well as on general recreation trends that may influence recreation participation rates in the future, also discussed above.

In the baseline projection, resource quality and recreational facilities are maintained such that the Delta retains its current level of competitiveness as a recreation destination, and forecasted visitation show increases of 1.9 million annual visitor days, or about 18 percent, over 40 years (excluding urban parks visitation). If this Plan is implemented, annual recreation visitation in the Delta (including resource-related recreation, right-of-way recreation, and tourism) could increase over baseline. Visitor-day projections have been developed for the baseline scenario and are presented in Table 8-31. Appendix H provides additional detail concerning the visitation model and long-run recreation participation rate forecasting.

Table 8 - 32 Summary of Predicted Annual Visitor Days under Baseline Scenario (in millions)

Activity Type	2020	2030	2040	2050	2060
Resource Related	8.0	8.2	8.6	9.0	9.2
Right-of-Way/Tourism Related	2.1	2.3	2.4	2.6	2.7

8.4.6.1 *Economic Potential*

Based on a quantitative framework, estimates have been made of potential future recreation levels and associated spending in the Delta. Recreation participation trends and Delta competitiveness over the next 40 years were considered. The baseline forecast assumes that

resource quality and recreational facilities are maintained such that the Delta retains its current level of competitiveness as a recreation destination.

Under the baseline scenario, recreation visitation in the Delta (including resource-related recreation, ROW recreation, and tourism) increases by roughly 1.9 million annual visitor days, or about 18 percent, over 40 years. Assuming that current visitor spending patterns remain unchanged and Delta business growth accommodates recreation-related spending increases, baseline visitation growth is estimated to increase spending in the Delta by roughly \$36 million (2020\$) to about \$250 million (2020\$) by 2060. Under the plan implementation scenario, recreation visitation and associated economic impacts in the Delta (including resource-related recreation, ROW recreation, and tourism) would increase over baseline.

8.4.7 Outcomes and Strategies Key Findings

- Multiple ongoing issues and constraints are affecting the sustainability of the recreation and tourism economy, including facilities' needs, water quality and waterway concerns, safety, regulatory environment, and no single management entity.
- Over the past 30 or more years, federal, state, regional, and local parks departments' budgets have been shrinking while costs have been increasing. The public spaces in the Delta have also seen the impacts of this reduced funding as parks have been closed or partially closed (Delta Meadows and Windy Cove⁸²), turned over to an outside concessionaire (Brannan Island), vandalized (DFW wildlife areas and others) or simply seen less maintenance or staff (Franks Track and others).
- Key opportunities and influences that will shape the future of the Delta as an evolving place include changing population demographics, changing access to public lands, market area development, agriculture and recreation trends, water conveyance, and climate change.
- Prior recommendations from twelve other plans/studies prepared for multiple agencies since 2002 covered the following broad topic areas
 - Facilities: Increase operations and maintenance of existing areas
 - Facilities: Expand and develop new public facilities and support existing private businesses
 - Water Quality Needs, Enhancement, and Protection
 - Information/Marketing
 - Programming
 - Boating Safety
 - Crime and Homelessness
- The same recommendations have been repeated in multiple studies, with no meaningful progress on the majority of more than 40 recommendations over the past

⁸² Though closed for a number of years after the 2008 to 2009 recession, it was re-opened again by State Parks a few years ago.

20 years. Reasons for lack of implementation are many and include lack of funding, complexity, and lack of a primary responsible entity.

- Among the recommendations from the 2012 ESP that have not been implemented, the absence of one centralized entity that has the mandate and authority to operate, maintain, program, and improve recreation and tourism facilities within the legal Delta remains an impediment to its economic sustainability. An organization should be designated or formed as a Delta recreation and tourism marketing and economic development facilitator.
- Initial resources should be focused on strategies to improve high priority issues including:
 - Facilities maintenance and improvement needs
 - Water quality and waterway issues, enhancement, and protection
 - Information, programming, and promotion
 - Boating safety and law enforcement
- The future growth of recreation in the Delta consists of five location-based strategies which would emphasize:
 - Delta waterways, specialized by boating type
 - Dispersed, small points of interest and activity areas such as marinas, farmer's markets, wineries, restaurants
 - Focal point complexes such as Legacy Communities or Bethel Island/Jersey Island/Big Break/Franks Tract
 - Natural habitat areas
 - The edges of existing and emerging urban areas that surround the Delta such as Stockton, Tracy, Rio Vista, and Lathrop
- Forecasted visitation show increases of 1.9 million visitor days, or about 18 percent, over 40 years (excluding urban parks visitation). If this Plan is implemented, all recreation and tourism visitation in the Delta could increase over baseline.
- Baseline visitation growth is estimated to increase spending in the Delta roughly \$36 million (2020\$) to about \$250 million (2020\$) by 2060. Plan implementation could increase the economic impact of recreation over the baseline.

8.5 Implementation and Financing Strategies

There are a number of key strategies that should be utilized in order to implement the recreation portion of the ESP which have been discussed above. These strategies and actions are described again below, with recommendations for lead agency for each action and potential funding.

8.5.1 Implementation and Lead Agencies

8.5.1.1 *Lead Agency and Multi-Agency Coordination*

The lack of improvements and investments in Delta recreation and tourism over the past 50 years have been due to a number of factors, including lack of funding. One of the main factors is the absence of one organization or agency with the mandate and authority to operate, maintain, and improve recreation and tourism facilities within the Legal Delta. It is strongly recommended that a new entity or preferably, a JPA, be designated or formed to lead implementation of this plan. A JPA would allow appropriate coordination and a more expedited implementation schedule. The Commission could restart its recreation advisory group to study the issue and recommend a path forward.

As a part of this report, major recreation improvements have been identified that could stimulate visitation and economic benefits. A responsive, Delta-focused public recreation, planning, development, and management facilitator organization is vital to accomplishment of such a program. To be effective, this entity needs an assured funding source that can be relied upon for both development and operation. The entity also needs to have the authority to assist in marketing the Delta, to facilitate actions by private enterprise, and to assist with, or manage, the operation of state and local recreation facilities.

Lead Agencies: Commission, Council, Resources Agency

8.5.1.2 *Priority Issues*

Initial resources should be focused on beginning the resolution of priority issues that have been ongoing for decades as discussed previously in Section 8.4.3.4. With focus, some of these issues can be strategically addressed by the Commission or a facilitator organization over the next five years. Recommendations for Priority Issues are summarized below:

1. Facilities
 - Expand access to existing public facilities, including Delta Meadows State Park
 - Develop permitting and planning assistance for small business development in primary zone and Legacy Communities

Lead Agencies: Facilitator Organization, Commission, CA State Parks, DFW, local and regional public park facilities managers

2. Water Quality Needs, Enhancement, and Protection
 - Partner with San Francisco Estuary Partnership to expand “Save the Waters you Love” campaign with DBW, counties, and private recreation providers

- Partner with counties and DBW to expand one-time funding to clean hazards and abandoned vessels from Delta waterways
- Partner with USACE to restart Delta Dredged Sediment Long Term Management Plan

Lead Agencies: Facilitator Organization, Commission, DBW, USACE, Counties, Reclamation Districts

3. Information, Programming, and Promotion

- Prioritize planning and implementation of both Great Delta Trail and Delta National Heritage Area
- Expand Delta Marketing Task Force and VisitCADelta.com
- Continue ongoing surveys of Delta recreation, especially visitor counts and hunting

Lead Agencies: Commission, Facilitator Organization

4. Safety

- Partner with the Conservancy, DBW, and counties to increase law enforcement presence in the Delta

Lead Agencies: Facilitator Organization, Commission, Conservancy, DBW, Counties

8.5.1.3 Public/Private Coordination and Partnerships

Nearly all recreation opportunities in the Delta are provided by private enterprise and are dependent on basic public investments in roadways, levees, and other infrastructure improvements. Public investment in synergistic recreation improvements can expand services to the public while creating settings for additional or expanded private facilities. Such coordinated action will be important in facilitating actions within Legacy Communities and edge communities, as well as with dispersed recreation points throughout the Delta.

Lead Agencies: Facilitator Organization, Commission, Counties, Caltrans

8.5.1.4 Primary Zone/Legacy Communities Development

A one stop permitting assistance should be developed for small businesses located in the primary zone and Legacy Communities. This assistance could be provided in the form of a permit or regulatory advisor that would work with entrepreneurs and local agencies to streamline permitting for appropriate recreation and tourism businesses, including restoration and enhancement of existing buildings.

Lead Agencies: Facilitator Organization, Commission, Counties, Cities

8.5.1.5 Strategic Levee Protection

Obtaining adequate flood protection is of the utmost importance in order to foster additional meaningful economic activity in the Delta. New and improved levees are necessary to encourage new investment and reinvestment in the Legacy Communities and recommended recreation areas. Strategic levee enhancements and/or the construction of ring levees in order to protect key assets should be carried out using any existing or new funding sources.

Lead Agencies: Facilitator Organization, DPC, USACE, CVFPB, Counties, Reclamation Districts or other LMA

8.5.1.6 Delta-wide Marketing

The Commission and the Conservancy have completed a number of strong steps towards an overall Delta brand and marketing strategy, and effort which should be continued and expanded. The average potential visitor still has to overcome a number of barriers in order to recreate in the Delta: it is hard to see “the Delta,” there’s no main entrance or focal point for information and activities, and facilities are sparse, spread out, and hard to access. Recent surveys and focus groups of Delta visitors still call for additional information on how to visit the Delta, where to go, and what to do, indicating that additional efforts are required.

Lead Agencies: Facilitator Organization, Commission, Conservancy

8.5.2 Financing Recommendations

There are several steps outlined above that need to occur before development of any new major recreation areas described in this Plan can occur. Each step, including organization, administration, development, and operation, all will require funding and will take time. State and local budgets are severely impacted by the current recession and pandemic and it is anticipated that a recovery will take years. However, small funds may be available through pooled resources, or larger funding from federal, state, or private grants, mitigation funds for Delta Conveyance, local or state bonding, or other creative strategies.

There are several recommended actions that could be initiated as soon as funding is identified, and which would all affect positive economic changes within the Delta. Several suggestions follow for funding for agencies that could affect many different areas and services. Table 8-32 below summarizes recommendations, responsible agencies, and partners.

8.5.2.1 Delta Protection Commission

Implementation of the Delta National Heritage Area should be prioritized, and appropriate funding secured to do so. Funding could also be provided for boosting planning and implementation of additional segments of the Great Delta Trail, especially those segments on existing public lands or that connect existing Legacy Communities and recreation and tourist nodes. Priority programs that may have positive impacts on recreation economic sustainability in need of funding augmentation also include the marketing task force, VisitCADelta.com, activating recreation advisory group, ongoing recreation surveys, and law enforcement working group.

8.5.2.2 Division of Boating and Waterways

Additional funding should be provided by the Legislature to CA State Parks Division of Boating and Waterways existing programs to remove abandoned vessels, combat invasive FAV/SAV, expand law enforcement and safety programs, and develop more waterway access for fishing and boating, including non-motorized boating access and community convenience docks. Funding also could be provided to DBW to create designated boating and canoe/kayak water

trails, including planning, and developing access points, as well as additional grant and low-interest loan funds to allow private enterprise upgrades and development.

8.5.2.3 Department of Parks and Recreation

Immediate funding could be provided for State Parks to complete planning and development of Delta Meadows State Park, with connections to Locke and other heritage and natural resources in the area. Funding should be provided to fully operate the Locke Boarding House and Windy Cove. Additional funding could be provided for further implementation of recommendations in the *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*.

8.5.2.4 Delta Conservancy

Funding to the Delta Conservancy Fund would allow the Conservancy to expand grant funding to local agencies, nonprofit organizations, and private entrepreneurs which provide recreation and tourism services in the Delta. These funds could be used to improve visitor centers and services at natural habitat areas, make key Gateway entry improvements, and expand visitor service offerings.

8.5.2.5 Local Governments

Funding could be provided to local governments to enable them to participate fully in ongoing planning processes. In addition, designated funds could allow counties and cities to dedicate staff to entitlement processing or creating one-stop permitting centers for the Delta. It could also allow local governments to participate in a Delta-wide economic development process or a JPA.

Table 8 - 33 Sponsor Agencies and Potential Partners for each Recommendation

Recommendation	Sponsor Agency	Partners
Establish Facilitator Organization	Commission	Council/Conservancy
Prioritize planning and implementation of Great Delta Trail and Delta National Heritage Area	Commission	Facilitator Organization, Conservancy
Institute ongoing surveys of Delta recreation and tourism	Commission	Facilitator Organization, Conservancy, Council, DWR
Expand Delta Marketing Task Force and promotion of VisitCADelta.com	Commission/ Conservancy	Facilitator Organization
Maintain and upgrade existing public facilities	Facilitator Organization or Commission	State Parks, local/regional park providers
Expand “Save the Waters You Love” campaign from Bay to Delta	Facilitator Organization or Commission	Conservancy, San Francisco Estuary Project
Implement permitting and planning assistance for Legacy Communities	Facilitator Organization or Commission	Conservancy and local agencies
Expand recreation facilities	Facilitator Organization	State Parks, Local Agencies, DBW
Restart Delta Dredged Sediment Long Term Mgt Plan, strengthen	USACE	Reclamation Districts, Facilitator Organization

Recommendation	Sponsor Agency	Partners
levees, simplify permitting		
Expand funding to remove water hazards and abandoned vessels	DBW	Commission or Facilitator Organization, Conservancy, local agencies
Increase law enforcement funding and presence	DBW/Local law enforcement agencies	Commission or Facilitator Organization

8.5.3 Implementation and Financing Key Findings

- Among the recommendations from the 2012 ESP that have not been implemented, the absence of one centralized entity that has the mandate and authority to operate, maintain, program, and improve recreation and tourism facilities within the legal Delta remains an impediment to its economic sustainability. An entity should be designated or formed as a Delta recreation and tourism marketing and economic development facilitator.
- In order to overcome these obstacles and improve the recreation economy, the key high priority issues we recommend for immediate action and focus include:
 - Partner with local and regional park and economic development agencies and State Parks to expand access to existing public facilities
 - Partner with USACE to restart the Delta Dredged Sediment Long Term Management Plan
 - Develop permitting and planning assistance for Legacy Community small businesses
 - Partner with local agencies and State Parks-Division of Boating and Waterways (DBW) to expand funding to remove water hazards and abandoned vessels, and improve local boating and water access facilities
 - Expand “Save the Waters You Love” campaign from the Bay to the Delta
 - Partner with the Delta Conservancy, DBW, and counties to increase law enforcement funding and presence in the Delta
 - Expand the Delta Marketing Task Force efforts and promotion of VisitCADelta.com
 - Prioritize planning and implementation of Great Delta Trail and Delta National Heritage Area
 - Institute regular ongoing surveys of Delta recreation and tourism
- The Delta Plan recommends the Commission and Conservancy should take steps to encourage partnerships to expand recreation and promote tourism. This effort should be re-doubled with outreach to engage state and local government and willing non-profits to investigate the need and desire for a facilitator organization.
- Funding may be provided through pooled resources, the State budget process, the Delta National Heritage Area, local budgets, bonds, grant funds, federal budget, or through the Delta Conveyance Authority/DWR.
- Several different entities are suggested that could logically implement various aspects of this ESP update, including a designated facilitator organization: the Commission,

Conservancy, Council, CA State Parks and DBW, DWR, USACE, CVFPB, Reclamation Districts and Levee Management Agencies , and Delta cities and counties.

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Acronyms & Abbreviations

ACS	The American Community Survey
ADV	Abandoned or Derelict Vessel
The Act	Delta Reform Act of 2009
AWAF	Abandoned Watercraft Abatement Fund
BDCP	Bay Delta Conservation Plan
BMP	Best Management Practices
BNA	California Boating Facilities Needs Assessment
CA State Parks	California Department of Parks and Recreation
CALFED	Consortium of state and federal agencies
Caltrans	California Department of Transportation
CBO	Community-Based Organization
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
Cfs	Cubic Feet per Second
Commission	Delta Protection Commission
Conservancy	Sacramento–San Joaquin Delta Conservancy
Council	Delta Stewardship Council
CPI	Consumer Price Index
CTTC	California Trade and Tourism Commission
CVFPB	Central Valley Flood Protection Board
CWC	California Water Code
Delta	The Sacramento–San Joaquin Delta
DAPC	The Delta Area Planning Council
DBW	California Department of Parks and Recreation, Division of Boating and Waterways
DCA	Delta Conveyance Design and Construction Authority
DMV	California Department of Motor Vehicles
DWR	Department of Water Resources
ESP	Economic Sustainability Plan
FAV	Floating Aquatic Vegetation

GIS	Geographic Information System
HAB	Harmful Algal Bloom
JPA	Joint-Powers Authority
LURMP	Land Use and Resource Management Plan
MOU	Memorandum of Understanding
NAICS	North American Industry Classification System
NGO	Non-Governmental Organization
PRC	Public Resources Code
PWC	Personal Watercraft
SAV	Submersed Aquatic Vegetation
SAVE	Surrendered and Abandoned Vessel Exchange
SB	Senate Bill
SLC	State Lands Commission
SLT	Solano Land Trust
SRA	State Recreation Area
SWP	State Water Project
TNC	The Nature Conservancy
UC	University of California
UOP	University of the Pacific
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Glossary of Key Terms

California Natural Resources Agency

Previously called the California Resources Agency. Pertinent to the Delta, departments within the agency include Department of Conservation, Department of Fish and Game, Department of Forestry and Fire Protection, Department of Parks and Recreation (including the Division of Boating and Waterways,) and Department of Water Resources.

California Trade and Tourism Commission

Among its many activities and services, CTTC maintains data and survey numbers on tourism and the economic impact of tourism within the State of California.

Delta Conveyance Project

The proposed Delta Conveyance Project includes constructing and operating new conveyance facilities in the Delta that would add to the existing water infrastructure. Two new intake facilities, each with 3,000 cubic feet per second (cfs) capacity for a total 6,000 cfs, would be located in the north Delta to divert water. The new conveyance facilities would include a tunnel to convey water from the new intakes to the existing pumping plants in the south Delta.

Delta Primary Zone

The lower elevation and largely water-covered and agricultural lands in the “core” of the Legal Delta, approximately 500,000 acres of waterways, levees, and farmed lands extending over portions of five counties: Solano, Yolo, Sacramento, San Joaquin, and Contra Costa

Delta Secondary Zone

The higher elevation and already-developed area outside the primary zone and within the Legal Delta including lands and waterways within portions of six counties: Alameda, Contra Costa, Sacramento, San Joaquin, Solano, and Yolo.

The Legal Delta

The entire region of the Delta including both the primary zone and the secondary zone within the six Delta counties.

Delta Community Area Plan (1983)

Designates most of the Delta as permanent agricultural land in 80-, 40-, and 20-acre parcels.

Delta Legacy Communities

A handful of selected Delta towns that have high cultural, historic, or ambiance value that give the Delta a distinctive sense of place. Examples are Clarksburg, Courtland, Isleton, Locke, Ryde, and Walnut Grove. A goal of the Economic Sustainability Plan is to promote economic development/sustainability in these Legacy Communities in a way that will capitalize on and preserve each community’s unique characteristics. See Chapter 10 of 2012 ESP for additional information.

Delta Protection Act of 1992

This act established the Delta Protection Commission, defined the primary zone and the secondary zone of the Delta. The Delta Protection Act requires the Commission to prepare, adopt, review, and maintain a comprehensive long-term resource management plan for land uses within the primary zone.

Delta Protection Commission

Established by the California Legislature in 1992, membership currently includes state agencies, local counties and cities, and Delta water agencies. The Commission was charged with preparing a land use and resource management plan for the primary zone of the Delta, addressing agriculture, recreation, and wildlife habitat on land areas. Local government land use actions in the primary zone can be appealed to the Commission. The Commission has no similar authority over state or federal agencies, or their land use actions.

Delta Protection Commission Land Use and Resource Management Plan

The Delta Protection Act requires the Commission to prepare, adopt, review, and maintain a comprehensive long-term resource management plan for land uses within the primary zone. The original plan was drafted, reviewed, and adopted by the Commission on February 23, 1995. The policies of the plan were adopted as regulations in December 2000. The Commission established a planning advisory committee, which began meeting in September 2008 to revise the plan; the Commission adopted the revisions in 2010.

Delta Reform Act of 2009

This act established the Delta Stewardship Council (Council) and directs completion of its Delta Plan by January 1, 2012.

Delta Stewardship Council

The primary responsibility of the Council is to develop, adopt, and implement a legally enforceable, comprehensive, long-term management plan for the Sacramento–San Joaquin Delta and the Suisun Marsh—the Delta Plan—that will achieve the coequal goals of “providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem” and do this “in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.”

Department of Water Resources

Located within the California Natural Resources Agency, oversees the state’s water management, flood protection, the State Water Project, and water planning.

Direct economic impact effects (Direct effects)

In economic impact assessment, direct effects are the initial changes in sales (economic output), wages (personal income), and jobs (employment). In this report, it includes all sales (recreation costs) incurred by both visitors and residents.

Economic Output

Output is sometimes referred to as revenue or sales. Output accounts for the total changes in the value of production in an industry for a given time period. This includes revenue from all sources of income to determine current activity levels.

EcoRestore

California EcoRestore is an initiative through the California Natural Resources Agency to help coordinate and advance at least 30,000 acres of critical habitat restoration in the Sacramento – San Joaquin Delta.

Employment

In economic impact assessment employment demonstrates the number of full- and part-time jobs generated on an annual basis.

Indirect economic impact effects (Indirect effects)

In economic impact assessment, indirect effects represent the impacts of inter-industry transactions as supplying industries respond to the increased demands from the direct recipient of these revenues. An example of indirect effects would include a hotel increasing its purchase of linen to meet the demand of people staying overnight in the Delta.

Induced economic impact effects (Induced effects)

In economic impact assessment induced effects reflect household consumption expenditures of direct and indirect sector employees. Examples of induced benefits include employee's expenditures on items such as retail purchases, housing, medical services, banking, and insurance.

Isolated Conveyance Facility

A proposed design for a canal or pipeline that transports water between two different locations while keeping it separate from Delta water.

Labor Income

Labor income is also referred to as personal income or employee compensation. It includes wages, salaries, benefits, and all other employer contributions. This measures the financial value of associated employment.

Levee

Structures built adjacent to rivers in the Sacramento–San Joaquin Delta for flood control and water conveyance. There are nearly 1,000 miles of levees in the Legal Delta.

Non-project levees

Levees built and maintained by local reclamation districts with no federal funding.

Project levees

Project levees were constructed by the U.S. Army Corps of Engineers and the non-federal sponsor, the Central Valley Flood Protection Board, as part of federal-state flood control

projects and were then turned over to the state for operations and maintenance. The state has in turn generally passed on the responsibility for routine maintenance to local reclamation districts and other levee maintaining agencies, although the Paterno Decision confirmed the state's continued basic liability with respect to these levees.

Sacramento–San Joaquin Delta Conservancy

Legislation enacted in 2009 created the Conservancy to act as a primary state agency to implement ecosystem restoration in the Legal Delta and to support environmental protection and the economic well-being of Delta residents.

State Water Project

Approved by voters in 1960, the State Water Project is a water storage and delivery system of 34 storage facilities, reservoirs, and lakes; 20 pumping plants, 4 pumping-generation plants; 5 hydroelectric power plants, and 700 miles of open canals and pipelines. It is maintained and operated by the California Department of Water Resources and provides water for 25 million Californians (two-thirds of the state's population) and 750,000 acres of irrigated farmland.

Total economic impact effects (Total effects)

In economic impact assessment, total effects are the sum of the direct, indirect, and induced effects.

Value Added

Value added, represents the distinct value added to a product during the production process.

WaterFix

The CA WaterFix Project was a proposed design for the construction and operation of new water diversion facilities near Courtland to convey water from the Sacramento River through two tunnels to the existing State and federal pumping facilities near Tracy. Support for this project was withdrawn by the Newsom administration in favor of a single tunnel Delta Conveyance Project.

Bibliography

- AugustineIdeas (2014). *Delta Protection Commission Market Research Report*. Delta Protection Commission, Sacramento, CA.
- Biegert, B., A. Brown, L.Lindhorst, G.Manriquez, S.Musiker, and A. Wu. (undated) *Law Enforcement in the Sacramento-San Joaquin Delta Region*. Sacramento – San Joaquin Delta Conservancy, Sacramento, CA.
- California Division of Boating and Waterways. 2002. *Sacramento-San Joaquin Delta Boating Needs Assessment (2000-2020)*. Prepared by The Dangermond Group, Sacramento, California.
- California Division of Boating and Waterways. 2011 *California Coastal Commission, Santa Monica Bay Restoration Foundation, Keep the Delta Clean Program. 2011. 2007-2009 California Boater Survey Report*, prepared by researchers at the Public Research Institute, San Francisco State University.
- California Department of Boating and Waterways. 2009. *Non-Motorized Boating in California*, prepared by NewPoint Group.
- California Department of Finance. (2019). *E-1 Population Estimates for Cities, Counties, and the State*. Retrieved from: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-1/>
- California Department of Fish and Game. (2019) *License Statistics*. Retrieved from: <https://www.wildlife.ca.gov/Licensing/Statistics>
- California Department of Motor Vehicles. (2019). *Total Vessel Registration by County*. Retrieved from: https://dbw.parks.ca.gov/?page_id=29371
- California Department of Parks and Recreation. 1997. *Sacramento-San Joaquin Delta Recreation Survey*.
- California Department of Parks and Recreation. 2012. *Surveys on Public Opinions and Attitudes on Outdoor Recreation in California*.
- California Department of Parks and Recreation. 2018. *California State Park System Statistical Report: 2016/2017 Fiscal Year*. Planning Division, California Department of Parks and Recreation.
- California Department of Parks and Recreation. 2011. *Recreation Proposal for the Sacramento-San Joaquin Delta and Suisun Marsh*. Planning Division, California Department of Parks and Recreation.
- California Department of Parks and Recreation (2014). *Survey on Public Opinions and Attitudes on Outdoor Recreation in California 2012*, Sacramento, CA.
- California Regional Travel & Tourism Outlook* Retrieved from: <https://industry.visitcalifornia.com/research/report/california-travel-tourism-forecast-region-2019-april>

- Cordell, H. Ken. Outdoor Recreation Trends and Futures, A Technical Document Supporting the Forest Service 2010 RPA Assessment. 2012.
- Dangermond, Pete. 1993. "Parks and Recreation: Vital to a Way of Life." In T. Palmer, ed. 1993. *California's Threatened Environment: Restoring the Dream*. Planning and Conservation League Foundation. Covelo, California: Island Press. P. 219.
- Delta Dredged Sediment Long-Term Management Strategy (LTMS). 2011. US Army Corps of Engineers. Retrieved from: <http://deltaltms.com/>
- Delta Protection Commission. 2006. "The Aquatic Recreation Component of the Delta Recreation Strategy Plan." Prepared by The Dangermond Group, Sacramento, California.
- Delta Protection Commission. 2010. "The Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties." Prepared by: Alta Planning + Design.
- Delta Protection Commission. 2010. *Framework for a Delta Economic Sustainability Plan*. Prepared by Bay Area Economics.
- Delta Protection Commission. (2010) Land Use and Resource Management Plan for the Primary Zone of the Delta. Sacramento, CA.
- Delta Protection Commission. 2011. National Heritage Areas. Accessed online: <http://delta.ca.gov/NHA/>
- Delta Protection Commission. 2011. Sacramento-San Joaquin Delta map. Accessed online: <http://delta.ca.gov/wp-content/uploads/2020/09/Delta-Map-2020-508.pdf>
- Delta Protection Commission (2012). Feasibility Study for a Sacramento-San Joaquin Delta National Heritage Area. Sacramento, CA. Retrieved from <http://delta.ca.gov/library/>
- Delta Protection Commission (2015). *Inventory of Recreation Facilities in the Sacramento-San Joaquin Delta*. Sacramento, CA. Retrieved from: <http://delta.ca.gov/library/>
- Delta Protection Commission (2019). *Delta Trail Eastern Blueprint Report (DRAFT)*, Sacramento, CA.
- Delta Stewardship Council. (2013). The Delta Plan: Ensuring a Reliable Water Supply for California, a Healthy Delta Ecosystem, and a Place of Enduring Value. Sacramento, CA.
- Downey and Clinkenbeard. 2005. "An Overview of Geologic Carbon Sequestration Potential in *Sacramento-San Joaquin Delta Recreation Concept Plan*. Prepared for California Department of Water Resources.
- Goldman, George, Bruce McWilliams, Vijay Pradhan, and Cheryl Brown. 1998. *The Economic Impact of Recreational Boating and Fishing in the Delta*. Department of Agricultural and Resource Economics. University of California, Berkeley. November 1998. Page 12.
- Hoover's. (2019). "Enterprise Database" Dun and Bradstreet. Accessed online: <http://subscriber.hoovers.com>
- Khanna S., J.Bellvert, J.D. Boyr, K.Shapiro, E.L. Hestir, M.J. Santos, and S.L. Ustin.(2016). *High-Resolution Mapping for Determining Long-Term Trends in the Distribution of Floating*

and Submerged Aquatic Macrophytes in the Delta. Bay-Delta Conference. Sacramento, CA.

- Mickel, A., D. Rolloff, E. Erickson, G. Shaw. Dept. of Recreation, Parks, & Tourism Administration, California State University, Sacramento. (2017). *Recreational Boating Use of the Sacramento-San Joaquin Delta*. Delta Protection Commission. <http://delta.ca.gov/library/>
- Mickel, Amy, David Rolloff, Stanley Taylor (2018). *California Boating Facilities Needs Assessment*. Dept. of Recreation, Parks, & Tourism Administration, California State University, Sacramento. California Department of Parks and Recreation, Division of Boating and Waterways. Sacramento, CA.
- Mickel, A., S. Taylor, D. Rolloff, G. Shaw. Dept. of Recreation, Parks, & Tourism Administration, California State University, Sacramento. (2019). *Recreation & Tourism in the Delta: A Study of Preferences for Activities and Facilities, Information Sources, and Economic Contributions of Delta Events*. Delta Protection Commission. Sacramento, CA.
- Milligan, Brett and Alejo Kraus-Polk (2016). *Human Use of Restored and Naturalized Delta Landscapes*. Center for Watershed Sciences, University of California, Davis. Retrieved from: <https://watershed.ucdavis.edu/library/human-use-restored-and-naturalized-delta-landscapes>
- Milligan, Brett and Alejo Kraus-Polk. (2018) *Franks Tract and Little Franks Tract User Survey*. Appendix C of California Department of Fish & Wildlife. Franks Tract Futures. Retrieved from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=158682&inline>
- North American Industry Classification System. 2019. U.S. Census Bureau. Accessed online: <http://www.census.gov/eos/www/naics/>
- Rolloff, D., A.E. Mickel, G. Shaw, E. Erickson,. Dept. of Recreation, Parks, & Tourism Administration, California State University, Sacramento. *Recreation Research Agenda*. (2016). Delta Protection Commission. Sacramento, CA.
- Sloop, Christina, Brooke Jacobs, Randi Logsdon, and Carl Wilcox. (2018) *Delta Conservation Framework: A Delta in Common*. California Department of Fish & Wildlife, Sacramento, CA. Retrieved from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=164022&inline>
- US Army Corps of Engineers. 2011. *Delta Dredged Sediment Long-Term Management Strategy*. Accessed online: <http://www.deltatms.com/index.htm>
- US Army Corps of Engineers. 2011. Sacramento-San Joaquin Delta newsletter. Accessed online: <http://www.spk.usace.army.mil/projects/civil/Delta/News.html>
- US Army Corps of Engineers. 2015. Long-Term Management Strategy for Dredged Material in the Delta. Program Review and Future Direction: Final Report. Prepared by MWH Americas, Inc., Sacramento, CA.
- U.S. Bureau of Labor Statistics. Workforce Statistics. United States Department of Labor. Accessed online: <http://www.bls.gov/iag/tgs/iag62.htm>

- U.S. Department of Agriculture. (2017). *Census of Agriculture – County Data, California*. National Agricultural Statistics Service. Washington, D.C. Retrieved from: <https://quickstats.nass.usda.gov>
- U.S. Department of the Interior. 1996. “National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.” Prepared by Fish and Wildlife Service, U.S. Department of Commerce, and U.S. Census Bureau.
- U.S. Department of the Interior. 2006. “National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.” Prepared by Fish and Wildlife Service, U.S. Department of Commerce, and U.S. Census Bureau.
- U.S. Department of the Interior. 2016. *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*. Prepared by Fish and Wildlife Service, U.S. Department of Commerce, and U.S. Census Bureau. Washington, D.C.
- Visser, M.A.; Brinkley, C.; Zlotnicki, J. (2019). *Socioeconomic Indicators Report: The Sacramento-San Joaquin Delta*. Delta Protection Commission, West Sacramento, CA. Retrieved from: <http://delta.ca.gov/library/>
- White, E.M., J.M. Bowker, A.E. Askew. L.L. Langner. J.R. Arnold, and D.B.K. English (2016). *Federal Outdoor Recreation Trends: Effects on Economic Opportunities*. Gen. Tech. Rep. PNW-GTR-945. Portland, OR. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station
- Yolo County Parks Division. 2016. Sustainable Parks Study. Elisa Sabatini, Study Author and Project Manager. Adopted June 14, 2016, County of Yolo.

Appendix H Recreation and Tourism Trends Data and Demand Model

Appendix I Select Delta Recreation Facilities

Appendix N Focus Groups Report

Appendix H Recreation and Tourism Trends Data and Demand Model

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Trends Data

Additional data was used to support conclusions presented in Chapter 8 regarding Current Status and Trends on Recreation and Tourism in the Delta. That data is summarized below.

CA DMV Records

Trends in recreation activity levels in the Delta over the last 20 years can be found in boat registrations within the Delta Market Area. The 2002 Sacramento-San Joaquin Delta Boating Needs Assessment¹ discussed trends in boating in California. Overall, it appeared that boat registration from 1980-2000 tended to be growing with overall population growth. Since 2010, the general trend in boat registration has been flat to slightly declining both Statewide and within the Primary and Secondary Market Areas. Table H-1 lists boating registration according to the Department of Motor Vehicles (DMV) registration data. Vessel registrations peaked both Statewide and in the Primary Market Area in 2001. Registration numbers have not been as low as 2018 since before 2000.

Table H-1 Total Vessel Registrations by Year within the Delta Market Area and Statewide

Year	Primary Market Area	Secondary Market Area	Statewide
1980	186,494	51,419	556,001
1990	242,765	85,940	795,335
2000	252,673	106,868	902,447
2001	266,517	114,321	961,877
2002	249,913	109,510	893,550
2003	265,295	116,979	959,849
2004	243,869	109,987	892,594
2005	257,857	117,954	956,466
2006	239,824	111,894	896,794
2007	252,855	119,461	955,730
2008	226,769	108,174	855,290
2009	237,229	113,687	900,345
2010	214,163	103,408	810,008
2011	223,900	109,234	855,243
2012	205,597	101,401	776,584
2013	215,875	106,691	820,490
2014	194,456	96,006	728,679
2015	204,993	100,769	772,542
2016	187,335	92,776	697,412
2017	199,092	98,880	745,641
2018	180,426	90,287	670,102

Source: State of California Department of Motor Vehicles 2019

CA DFG Hunting/Fishing Licenses

In 2018, approximately 1 million resident sport fishing licenses statewide were issued. That number has been generally declining since 1995. Since 2010 the numbers have been somewhat level, with some slight increases and some slight decreases.

Table H-2 Total Resident Sport Fishing Licenses by Year Statewide

Year	Total Statewide
1995	1,433,765
1996	1,401,972
1997	1,384,963
1998	1,287,668
1999	1,272,284
2000	1,265,420
2001	1,229,770
2002	1,180,641
2003	1,124,024
2004	1,268,728
2005	1,245,007
2006	1,256,784
2007	1,283,454
2008	1,203,586
2009	1,179,195
2010	1,112,783
2011	999,968
2012	1,035,224
2013	1,030,016
2014	990,474
2015	985,984
2016	1,025,422
2017	1,012,056
2018	1,015,781
2019	1,007,428

Source: California Department of Fish and Game’s website

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=59818&inline>

The total number of hunting licenses issued in California over the past 10 years has increased, by approximately 20%. These numbers continue an increasing hunting trend since 2000. There are no estimates for how these numbers related to in-Delta hunting.

Table H-3 Total Hunting Licenses by Year Statewide

Year	Total Statewide	Game Bird Hunting
2000	1,562,659	945,611
2001	1,586,102	960,224

Year	Total Statewide	Game Bird Hunting
2002	1,534,228	903,670
2003	1,563,647	950,701
2004	1,593,517	974,580
2005	1,625,078	1,000,639
2006	1,655,760	1,025,345
2007	1,718,657	1,091,280
2008	1,670,190	1,040,918
2009	1,679,864	1,056,402
2010	1,677,864	1,055,090
2011	1,863,202	1,212,512
2012	1,988,422	1,298,139
2013	2,032,788	1,341,094
2014	1,979,809	1,303,837
2015	2,130,872	1,446,893
2016	2,142,312	1,446,636
2017	2,142,122	1,444,059
2018	2,112,980	1,423,058
2019	2,040,946	1,370,151

Source: California Department of Fish and Game's website
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=59821&inline>

United States Department of Agriculture, Agricultural Tourism

The U.S. Department of Agriculture, National Agricultural Statistics Service regularly publishes a Census of Agriculture. The most recent was published in 2016. Two of the categories for which they collect data are directly relevant to this topic area – (1) income from agritourism and recreational services, and (2) value of agricultural products sold directly to individuals for human consumption. The USDA data is only broken down by county, so it is unknown how many farms located in the legal Delta have agritourism or recreation services, or have direct sale operations. However, this data does seem to indicate that both are growing as farmers look to diversify their income streams.

Income from agritourism and recreational services includes income generated from hunting, fishing, wine tours, hay rides, etc. In 2017, there were 111 farms in the six Delta counties that reported income from this source, with a total value of over \$7 million. The number of farms has approximately tripled since 2002, though decreased from a high of 184 farms in 2012 with income up. Average income was approximately \$64,000 per farm, compared to \$26,000 in 2012. Per-county averages ranged from \$14,000 in Alameda and Yolo Counties to \$120,000 in San Joaquin County. See Tables H-4A – H-4C for more details.

Table H-4A Number of Farms with Income from Farm Related Sources: 2017, 2012, 2007 and 2002: Agritourism and Recreational Services by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	4	7	9	8	3	8	39
2007	4	13	18	11	13	20	79
2012	16	33	45	23	44	23	184
2017	12	13	29	21	22	14	111
Change	8	6	20	13	19	6	72

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

Table H-4B Income (\$1,000) from Farm Related Sources: 2017, 2012, 2007 and 2002: Agritourism and Recreational Services by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	undisclosed	\$ 135	undisclosed	\$ 42	\$ 100	\$ 55	\$ 332
2007	\$ 29	\$ 487	\$ 435	\$ 913	\$ 1,742	\$ 361	\$ 3,967
2012	\$ 196	\$ 665	\$ 1,137	\$ 427	\$ 1,557	\$ 734	\$ 4,716
2017	\$ 170	\$ 422	\$ 1,633	\$ 2,528	\$ 2,132	\$ 202	\$ 7,087
Change	\$ 170	\$ 287	\$ 1,633	\$ 2,486	\$ 2,032	\$ 147	\$ 6,755

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

Table H-4C Average Income Per Farm (\$1,000) from Farm Related Sources: 2017, 2012, 2007 and 2002: Agritourism and Recreational Services by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	undisclosed	\$ 19	undisclosed	\$ 5	\$ 33	\$ 7	\$ 9
2007	\$ 7	\$ 37	\$ 24	\$ 83	\$ 134	\$ 18	\$ 50
2012	\$ 12	\$ 20	\$ 25	\$ 19	\$ 35	\$ 32	\$ 26
2017	\$ 14	\$ 32	\$ 56	\$ 120	\$ 97	\$ 14	\$ 64
Change	\$ 14	\$ 13	\$ 56	\$ 115	\$ 64	\$ 8	\$ 55

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

The value of agricultural products sold directly to individuals for human consumption includes the market value of products sold at roadside stands, farmers' markets, pick-your-own sites, etc. In 2017 there were 754 farms in the six Delta counties which reported income from this source, with a market value of over \$52 million, a doubling of income since 2007. The number of farms has increased in Alameda, Solano, and Yolo counties since 2002, but has declined in Contra Costa, San Joaquin, and Sacramento counties. Though, value has increased in all counties over that time period. Over all Delta counties, the number of farms has increased by 15 percent while the reported market value increased by more than 55 percent. The average

market value per farm was \$70,000 in 2017, doubling the value of \$35,000 in 2002. See Tables H-5A – H-5C for more details

Table H-5A Number of Farms with Agricultural Products Sold Including Direct Sales: 2017, 2012, 2007 and 2002: Value of agricultural products sold directly to individuals for human consumption by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	23	79	177	200	70	92	641
2007	29	76	143	232	89	95	664
2012	*	*	238	*	110	136	484
2017	73	60	175	187	123	136	754
Change	50	(19)	(2)	(13)	53	44	113

*No 2012 data for these counties

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

Table H-5B Market Value (\$1,000) of Agricultural Products Sold Including Direct Sales: 2017, 2012, 2007 and 2002: Value of agricultural products sold directly to individuals for human consumption by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	\$ 168	\$1,163	\$ 2,054	\$ 8,165	\$2,610	\$ 8,308	\$ 22,468
2007	\$ 322	\$1,776	\$ 3,497	\$11,837	\$1,337	\$ 6,324	\$ 25,093
2012	*	*	\$ 3,911	*	\$2,701	\$ 9,426	\$ 16,038
2017	\$ 3,606	\$2,145	\$ 8,592	\$11,279	\$9,565	\$17,324	\$ 52,511
Change	\$ 3,438	\$ 982	\$ 6,538	\$3,114	\$6,955	\$ 9,016	\$ 30,043

*No 2012 data for these counties

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

Table H-5C Average Market Value (\$1,000) per Farm of Agricultural Products Sold Including Direct Sales: 2017, 2012, 2007 and 2002: Value of agricultural products sold directly to individuals for human consumption by County

Year	Alameda	Contra Costa	Sacramento	San Joaquin	Solano	Yolo	All Delta Counties
2002	\$ 7	\$ 15	\$ 12	\$ 41	\$ 37	\$ 90	\$ 35
2007	\$ 11	\$ 23	\$ 24	\$ 51	\$ 15	\$ 67	\$ 38
2012	*	*	\$ 16	*	\$ 25	\$ 69	\$ 33
2017	\$ 49	\$ 36	\$ 49	\$ 60	\$ 78	\$ 127	\$ 70
Change	\$ 42	\$ 21	\$ 37	\$ 19	\$ 40	\$ 37	\$ 35

*No 2012 data for these counties

Source: USDA, National Agricultural Statistics Service, Census of Agriculture - County Data, California

The U.S. Coast Guard (USCG) conducted a National Recreational Boating Survey in 2012. In this study, they found that boaters averaged 11.3 use days per year. In California, overall 20.2% of the population participated in recreational boating, while 9.5% fished from a boat, and 10.7% used a canoe/kayak.

Visitation Estimates Based on Demand Estimates

Delta visitation estimates are derived from county-level population data in combination with recreation participation rates and activity day data for a range of recreation types. This section provides detailed data from this participation-based recreation demand model. The model methodology involves the following:

1. Participation rates and activity days (per participant) for various Delta activities are established based on survey data;
2. Delta market capture rates for various recreation activities are determined as a percentage of market demand, considering other recreation opportunities available to residents of the Market Area; and
3. Population levels in the Market Area, participation rates, and Delta market capture rates are combined to yield estimates of recreational demand, expressed in visitor day counts, for each recreation activity.

Tables above and in Chapter 8 present estimated participation rates for various activities. These survey data reveal variation in reported participation rates and rate trends for key Delta activities. State Parks data suggesting increases in participation for a number of key activities, while USFWS data reveal declines. Long-run participation rate projections provide a reasonable alternative assessment of participation rates and trends for demand modeling, with forecasts for boating and wildlife viewing participation projecting fairly stable participation in these important Delta activities. For other key Delta activities, the forecasts indicate relatively modest participation rate declines over time. The participation rates relied on for the Delta demand model, shown in Table H-6, adjust 2012 ESP participation rate assumptions to reflect trends between then and 2020, based on long-run forecasting.

Table H-6 Ranges of Participation Rates for Selected Activities Statewide in California

Activity Type	Participation Rates
Motor boating, personal watercraft	20.9%
Fishing – freshwater	31.2%
Sail boating	6.4%
Paddle sports	18.2%
Camping in developed sites with facilities	39.7%
RV/trailer camping with hookups	12.0%
Hunting	4.7%
Wildlife viewing, bird watching, viewing natural scenery	57.4%
Outdoor Photography	38.8%
Picnicking in picnic areas	68.3%

Activity Type	Participation Rates
Swimming in freshwater lakes, rivers and/or streams	50.5%
Day hiking on trails	52.4%
Bicycling on paved surfaces	40.9%
Bicycling on unpaved surfaces and trails	18.4%
Driving for pleasure, sightseeing, driving through natural scenery	74.0%
Visiting historic or cultural sites	65.2%
Attending outdoor cultural events	54.0%
Visiting outdoor nature museums, zoos, gardens, or arboretums	60.6%

Activity days are the number of days per year that a recreation participant engages in a recreation activity. Similar to the 2012 ESP, the demand model relies heavily on State Parks' Survey on Public Opinions and Attitudes on Outdoor Recreation in California (SPOA) to establish activity day assumptions. However, data from Recreational Boating Use of the Sacramento - San Joaquin Delta (DPC 2017) presents Delta-specific data, from a survey of boating in 2014-2015 and from a Division of Boating and Waterways (DBW)-sponsored statewide motorized boater survey of activity in 2015-2016. These Delta-specific boating data indicate notably higher boating days in the Delta, and the demand model captures these new data. Activity days for boating (12.3 days per year) reflects the average from these data sources. All other activity days assumptions are from SPOA 2012 data reporting.

Table H-7 Activity Days for Selected Activities Statewide in California

Activity Type	Activity Days
Motor boating, personal watercraft	12.3
Fishing – freshwater	9.1
Sail boating	6.2
Paddle sports	6.3
Camping in developed sites with facilities	5.4
RV/trailer camping with hookups	8.9
Hunting	10.6
Wildlife viewing, bird watching, viewing natural scenery	35.1
Outdoor Photography	17.4
Picnicking in picnic areas	5.7
Swimming in freshwater lakes, rivers and/or streams	8.0
Day hiking on trails	16.2
Bicycling on paved surfaces	25.8
Bicycling on unpaved surfaces and trails	13.5
Driving for pleasure, sightseeing, driving through natural scenery	20.7
Visiting historic or cultural sites	6.1
Attending outdoor cultural events	6.6
Visiting outdoor nature museums, zoos, gardens, or arboretums	6.6

Capture rates in the model identify the percentage of recreation demand (i.e., recreational visitor days calculated from population, participation, and days) that the Delta achieves, as recreation participants compare and select recreation destinations from the set of competitive recreation areas in the region. Capture rate assumptions are based on the research team’s professional judgment, combined with knowledge of existing demand on some activities, and the suite of outdoor recreation options in the Market Area. The Delta capture rates established in the 2012 ESP are still relevant in 2020, as the Delta is similarly competitive for recreation now as it was then. Table H-8 presents the capture rates relied on by the demand model.

Table H-8 Delta Recreation Capture Rates within the Market Area

Activity Type	Capture Rates
Motor boating, personal watercraft	30.00%
Fishing – freshwater	20.00%
Sail boating	10.00%
Paddle sports	5.00%
Camping in developed sites with facilities	0.25%
RV/trailer camping with hookups	0.25%
Hunting	15.00%
Wildlife viewing, bird watching, viewing natural scenery	0.50%
Outdoor Photography	0.15%
Picnicking in picnic areas	0.25%
Swimming in freshwater lakes, rivers and/or streams	1.00%
Day hiking on trails	0.10%
Bicycling on paved surfaces	0.25%
Bicycling on unpaved surfaces and trails	0.10%
Driving for pleasure, sightseeing, driving through natural scenery	2.00%
Visiting historic or cultural sites	0.50%
Attending outdoor cultural events	2.00%
Visiting outdoor nature museums, zoos, gardens, or arboretums	0.50%

Estimates of Delta recreation demand, expressed in visitor days, reflect the combination of population, participation, activity days, and Delta capture rates. The modeling multiplies participation rates by population numbers in the Market Area (estimated at approximately 13 million residents) by average annual days of participation, and then by capture rates for the Delta. The calculation yields a Delta-specific recreation demand estimate for each activity, for recreation participants residing within the Market Area. Because recreation participants often participate in multiple activities over the course of a day, an adjustment is made to estimate unique visits to the Delta. The analysis divides the gross number activity days by the average number of activities per person per day (estimated at 3.3) to eliminate double counting and establish the estimate of unique visitor days.

Table H-9 Recreation Demand from Market Area (Visitor Days Per Year) for selected resources and right-of-way/tourism activities (in millions) in 2020

Activity Type	2020 Visitor Days from Market Area (Millions)
Motor boating, personal watercraft	3.07
Fishing – freshwater	2.27
Sail boating	0.16
Paddle sports	0.23
Camping in developed sites with facilities	0.02
RV/trailer camping with hookups	0.01
Hunting	0.30
Wildlife viewing, bird watching, viewing natural scenery	0.40
Outdoor Photography	0.04
Picnicking in picnic areas	0.04
Swimming in freshwater lakes, rivers and/or streams	0.16
Day hiking on trails	0.03
Bicycling on paved surfaces	0.11
Bicycling on unpaved surfaces and trails	0.01
Driving for pleasure, sightseeing, driving through natural scenery	1.23
Visiting historic or cultural sites	0.08
Attending outdoor cultural events	0.28
Visiting outdoor nature museums, zoos, gardens, or arboretums	0.08
Total Visitor Days	8.54

While the Delta primarily serves recreation demand from residents of the Market Area, it also attracts visitors from other parts of California and beyond. The demand model relies on the estimate that approximately 85 percent of the overall demand for recreation in the Delta comes from the surrounding Market Area. The calculations upward adjust demand from the Market area to fully account for recreation activity in the Deltas. Table H-10 presents total visitor day estimates, including visitation by Market Area residents, as well as visitors from more distant locations.

Table H-10 Total Recreation Demand (Visitor Days Per Year) for selected resources and right-of-way/tourism activities (in millions) in 2020

Activity Type	2020 Total Visitor Days (Millions)¹
Motor boating, personal watercraft	3.62
Fishing – freshwater	2.67
Sail boating	0.19
Paddle sports	0.27
Camping in developed sites with facilities	0.03
RV/trailer camping with hookups	0.01
Hunting	0.35

Activity Type	2020 Total Visitor Days (Millions) ¹
Wildlife viewing, bird watching, viewing natural scenery	0.47
Outdoor Photography	0.05
Picnicking in picnic areas	0.05
Swimming in freshwater lakes, rivers and/or streams	0.19
Day hiking on trails	0.04
Bicycling on paved surfaces	0.12
Bicycling on unpaved surfaces and trails	0.01
Driving for pleasure, sightseeing, driving through natural scenery	1.44
Visiting historic or cultural sites	0.09
Attending outdoor cultural events	0.33
Visiting outdoor nature museums, zoos, gardens, or arboretums	0.09
Total Visitor Days	10.04

Total visitor day estimate from demand model. Excludes urban park visits.

The ESP summarizes visitor day estimates into primary recreation types. Visitation estimates are aggregated into categories of (1) boating, fishing, and camping; (2) hunting; (3) other resource-related; and (4) right-of-way and tourism recreation. Other resource-related includes wildlife viewing, bird watching, viewing natural scenery; outdoor photography; picnicking in picnic areas; and swimming in freshwater lakes, rivers and/or streams. Right-of-way and tourism activities include day hiking on trails; bicycling on paved surfaces; bicycling on unpaved surfaces and trails; driving for pleasure, sightseeing, driving through natural scenery; visiting historic or cultural sites; attending outdoor cultural events; and visiting outdoor nature museums, zoos, gardens, or arboretums. Table H-11 presents visitor days by primary activity.

Table H-11 Summary of Visitor Days Per Year by Primary Activity (in millions) in 2020

Activity Type	Total Visitor Days (2020) ¹
Boating, Fishing, and Camping	6.79
Hunting	0.35
Other Resource-Related	0.76
ROW & Tourism	2.14
Total Visitor Days	10.04

Total visitor day estimate from demand model. Excludes urban park visits.

Prior Recommendations

Over the past twenty years, more than twelve other plans/studies prepared for multiple agencies have made repeated recommendations to improve recreation and tourism in the Delta. Most of those recommendations have not been implemented. The recommendations, with the source, are presented below in Tables H-12 - H-18.

Table H-12 Prior Recommendations - Facilities: Increase operations and maintenance of existing areas

Prior Recommendation	Source
Rehabilitate and expand access to State Parks in the Delta including Delta Meadows, Brannon Island, Franks Tract	CDPR 2011, Delta Plan
Upgrade and rehabilitate existing facilities, both public and private	DBW 2002, Michel et. al 2019
Clean up derelict buildings in Legacy Communities	THG 2020
Improve Roads	THG 2020, Mickel et. al 2019, Augustineldeas 2014, Delta Plan, CDPR 2011
Launch Clean Up Programs	THG 2020, DC/DPC 2014

Table H-13 Prior Recommendations - Facilities: Expand and develop new public facilities and support existing private businesses

Prior Recommendation	Source
Expand public bathrooms, trash facilities, and add parking	DBW 2002, DPC 2006, THG 2020, DC/DPC 2014, Sloop et. al. 2018, Mickel et. al, 2018, Michel et. al 2017, Delta Plan, CDPR 2011
Expand water access facilities	Mickel et. al 2019, Sloop et. al. 2018, , Mickel et. al 2018, , Mickel et. al 2017, , Delta Plan, CDPR 2011, DBW 2002, DPC 2006
Implement the Great Delta Trail	CDPR 2011
Establish Bike Lanes	THG 2020, Delta Plan, CDPR 2011
Establish Hiking Trails	THG 2020, Delta Plan, CDPR 2011
Establish Water Trails	Delta Plan, CDPR 2011
Explore recreation at Cache Slough	Delta Plan, CDPR 2011
Increase Access to Twitchell and Sherman Islands	Delta Plan, CDPR 2011
Add facilities at Mossdale/Vernalis	Delta Plan, CDPR 2011
Expand Delta Meadows and Locke Boarding House	CDPR 2011
Develop Barker Slough, Elkhorn Basin, Write-Elmwood Tract, South Delta	Delta Plan, CDPR 2011
Add facilities at Clifton Court Forebay	Delta Plan, CDPR 2011
Incorporate public access to restoration projects	Sloop et. al 2018, Delta Plan, CDPR 2011, ESP 2012
Improve private amenities (more restaurants, hotels, shops, services, etc.)	Mickel et. al 2019, DBW 2002, THG 2020, DPC 2006

Table H-14 Prior Recommendations - Water Quality Needs, Enhancement, and Protection

Prior Recommendation	Source
Enhance water quality for body contact swimming and other recreation	Mickel et. al 2019, Delta Plan, DBW 2002, DPC 2006
Reduce organic waste from wastewater and homeless	THG 2020, CDPR 2011, DPC 2006
Remove Abandoned Vessels and derelict boats	THG 2020, CDPR 2011, DPC 2006
Control and Remove invasive aquatic vegetation	Mickel et. al 2018, , Mickel et. al 2017, CDPR 2011, DBW 2002, DPC 2006
Remove navigation hazards, snags, and debris	Mickel et. al 2018, , Mickel et. al 2017, CDPR 2011, DPC 2006

Table H-15 Prior Recommendations - Information/Marketing

Prior Recommendation	Source
Expand Delta-wide Marketing	DPC 2006, THG 2020
Create one overall information reference for all things Delta	THG 2020, Mickel et. al 2019, DPC 2015
Create and install better signage for trails, roads, wayfaring, boundaries, no trespassing	DC/DPC 2014, Biegert et al. (undated), DPC 2015, Augustineldeas 2014, CDPR 2011, DPC 2006
Create and distribute pamphlets, maps, and/or develop information kiosks	DC/DPC 2014, Biegert et al. (undated), Delta Plan, CDPR 2011
Improve interpretation at wildlife areas and ecological reserves	Delta Plan, CDPR 2011

Table H-16 Prior Recommendations - Programming

Prior Recommendation	Source
Increase annual events and festivals	THG 2020, Mickel et. al 2019, Augustineldeas 2014
Encourage group usage and competitions (e.g. running, fishing, biking)	THG 2020
Form more business partnerships and promotions	THG 2020, Delta Plan
Create Youth Ambassador programs	THG 2020
Develop and manage NHA	Delta Plan, CDPR 2011, ESP 2012
Enhance agritourism	Delta Plan, CDPR 2011, DPC 2015, ESP 2012

Table H-17 Prior Recommendations – Public Safety

Prior Recommendation	Source
Increased boater education	Biegert et al. (undated), Mickel et. al 2017, Delta Plan, DPC 2006
Increased law enforcement budgets for more marine patrols and other law enforcement presence	Biegert et al. (undated), Mickel et. al 2017, DPC 2006
Increase DBW grants	Biegert et al. (undated)
Make roads safer for driving and biking	THG 2020

Table H-18 Prior Recommendations – Legislative/Regulations

Prior Recommendation	Source
Increased funding for Delta recreation and tourism – develop and fund Delta Improvement Fund	ESP 2012
Refine regulations for appropriate recreation/tourism related development in Legacy Communities	ESP 2012, DPC 2006
Streamline regulations and permits for dredging and hazard removal at marinas and adjacent waterways	ESP 2012, DPC 2006, DBW 2002

Appendix I Select Delta Recreation Facilities (Chapter 8)

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Delta Establishments

The Delta is an established recreational destination with an array of facilities. Given the importance of these facilities and the disparate political economic geography of the Delta, it was necessary to apply a multifaceted approach to survey these facilities. The first step in researching facilities was through a query of geocoded enterprises from the May 2019 Dun and Bradstreet Hoovers enterprise database.¹ This identified Delta establishments by category with the following facilities:

Table I-1 Delta Establishments: Businesses Offering Recreation-Related Facilities and Services within the Delta with Changes in Numbers of Establishments Since 2008

Type of Establishment	Number of Facilities or Services	Change since 2008
Marinas	97	(-15)
Camping/RV Facilities	48	(-16)
Restaurants ²	64	(-17)
Fuel Docks	34	(-11)
Boat Builders	8	(-8)
Boat Dealers	35	(0)
Boat Repair Facilities	36	(-13)

Source: Hoovers, UOP

Delta Marinas

Verified marina's from the initial stage were further augmented with reference to the California Delta Chambers and Visitor's Bureau website,³ and the Pacific Inter-Club Yacht Association (PICYA) yacht club guide.⁴ These marinas were then verified as being operational telephonically. At all stages when contacting the marinas additional camping/recreational vehicle (RV), repair services, gas dock, restaurant, and convenience store facilities were also identified. As a result of this analysis 97 Delta marinas were identified, which are detailed in Table I-2 below. Of these 97 marinas: 34 had fuel docks, 19 offered repair services, 29 had restaurants, 41 offered camping/RV facilities, 35 had convenience stores and 18 were PICYA members.

Table I-2 Delta Marinas

Marina	Fuel Dock	Repairs	Restaurant	Camping/RV	Convenience Store	PICYA
Anchor Marina	-	-	-	Yes	Yes	-
Andreas Cove Yacht Club	-	-	-	-	-	Yes

¹ Dun & Bradstreet Hoovers, accessed on 29 May 2019: <https://www.dnb.com/>

² Restaurants listed here include those associated with marinas, in the Primary Zone, or located in Legacy Communities.

³ California Delta Chambers & Visitor's Bureau: <https://californiadelta.org/>

⁴ The Pacific Inter-Club Yacht Association: http://www.yachtclubguide.com/p_i_c_y_a_member_clubs.htm

Marina	Fuel Dock	Repairs	Restaurant	Camping/RV	Convenience Store	PICYA
Antioch Municipal Marina	Yes	-	-	-	-	-
Arrowhead Harbor	-	-	-	Yes	Yes	-
B & W Resort	Yes	-	-	Yes	Yes	-
Bethel Harbor LTD	Yes	Yes	-	Yes	Yes	-
Big Break Marina	-	-	-	-	-	-
Boathouse Marina	-	-	-	-	-	-
Brannan Island SRA	Yes	-	-	Yes	-	-
Brannan Island Time Marina	-	-	-	Yes	-	-
Bridge Marina Yacht Club	-	-	-	-	-	Yes
Bullfrog Landing & Marina	Yes	-	-	-	Yes	-
Caliente Isle Harbor & Yacht Club	-	-	-	-	-	Yes
City of Pittsburg Marina	Yes	-	Yes	-	-	-
Clarksburg Marina	-	-	-	-	-	-
Cliffs River Marina Inc	Yes	Yes	-	-	Yes	-
Cruiser Haven Marina	-	Yes	-	Yes	-	-
Cruiser Haven Yacht Club	-	-	-	-	-	Yes
Dagmar's Landing	-	-	-	-	Yes	-
Deckhands Marina	-	Yes	-	-	-	-
Delta Bay Marina & RV Park	-	-	Yes	Yes	Yes	-
Delta Marina Yacht Harbor	Yes	Yes	Yes	Yes	Yes	-
Delta Yacht Club	-	-	-	-	-	Yes
Discovery Bay Marina & Yacht Harbor	Yes	Yes	Yes	-	Yes	-
Discovery Bay Yacht Club	-	-	-	-	-	Yes
Dixon Boat and Fishing Club	-	-	Yes	-	-	Yes
Driftwood Marina & Yacht Club	Yes	Yes	-	-	-	-
Easy C's Marina	-	-	-	-	-	-
Eddo's Harbor & RV Park Inc	Yes	-	-	Yes	Yes	-
Emerald Pointe Marina	-	-	-	-	-	-
Freeport Marina Inc	-	-	Yes	-	Yes	-
Haven Acres Resort	-	-	Yes	-	-	-
Hennis Marina	-	Yes	-	Yes	-	-
Hidden Harbor	Yes	-	-	-	-	-
Hidden Harbor Yacht Club	-	-	-	-	-	Yes

Marina	Fuel Dock	Repairs	Restaurant	Camping/RV	Convenience Store	PICYA
Hogback Island Recreation Fac	-	-	-	-	-	-
Holland Riverside Marina	-	-	-	Yes	Yes	-
King Island Marina & Resort	Yes	Yes	Yes	Yes	Yes	-
Ko-Ket Resort	Yes	-	Yes	Yes	Yes	-
Korth's Pirates Lair	Yes	Yes	Yes	-	Yes	-
Ladd's Stockton Marina	-	Yes	-	-	Yes	-
Lake Washington Sailing Club	-	-	-	-	-	Yes
Landing 63	-	-	-	-	-	-
Lauritzen Yacht Harbor	Yes	Yes	-	-	-	-
Lazy M Marina	Yes	-	-	-	Yes	-
Lighthouse Resort and Marina	-	-	Yes	Yes	Yes	-
Lloyds Holiday Harbor	-	-	-	-	-	-
Lost Isle Resort	-	-	Yes	-	-	-
Marina West Yacht Club	-	-	-	-	-	Yes
Marine Emporium	-	Yes	-	-	-	-
New Life Marina	-	-	-	Yes	-	-
Orwood Resort	Yes	-	Yes	Yes	Yes	-
Owl Harbor Marina	-	-	-	Yes	-	-
Ox Bow Marina	Yes	Yes	-	-	Yes	-
Paradise Point Marina	-	-	-	-	Yes	-
Perry Boat Harbor & Dry Dock	-	Yes	-	-	-	-
Piper Point Marina	-	-	Yes	Yes	-	-
Pittsburg Yacht Club	-	-	Yes	-	-	-
Rancho Marina, Mobile Home & RV Park	-	-	-	-	-	-
Riverboat Marina	Yes	Yes	Yes	Yes	-	-
RiverPoint Landing Marina & Resort	Yes	-	-	Yes	-	-
Rivers Edge Marina & Resort	-	-	-	Yes	-	-
Rivers End Marina & Resort	-	-	-	Yes	Yes	-
Russo's Marina	Yes	-	-	Yes	-	-
Sacramento Marina	Yes	Yes	-	-	-	-
Sacramento Yacht Club	-	-	Yes	Yes	-	Yes
Saint Francis Yacht Club	-	-	-	Yes	-	Yes
San Joaquin Yacht Club	-	-	-	Yes	-	Yes
Sherman Lake Resort	-	-	-	Yes	Yes	-

Marina	Fuel Dock	Repairs	Restaurant	Camping/RV	Convenience Store	PICYA
Sherwood Harbor Marina & RV Park	Yes	-	-	Yes	-	-
Snug Harbor Resort	Yes	-	Yes	Yes	Yes	-
Spindrift Marina	-	-	Yes	-	-	-
Sportsmen Yacht Club	-	-	-	-	-	Yes
Stans Yolo Marina	-	-	-	Yes	Yes	-
Stockton Downtown Marina	-	-	Yes	-	Yes	-
Stockton Sailing Club	-	-	-	-	-	Yes
Stockton Yacht Club	-	-	-	-	-	Yes
Sugar Barge Marina & RV Park	Yes	-	Yes	Yes	Yes	-
Sunset Harbor Marina	-	-	-	-	Yes	-
Tiki Lagun Resort & Marina	Yes	-	Yes	Yes	Yes	-
Tower Park Marina	-	Yes	-	Yes	Yes	-
Tracy Oasis Marina Resort	Yes	Yes	Yes	Yes	Yes	-
Turner Cut Resort	Yes	-	Yes	Yes	-	-
Turtle Beach RV Resort	-	-	-	-	-	-
Union Point Marina Bar & Grill	-	-	-	-	-	-
Vieira's Resort	Yes	-	Yes	Yes	Yes	-
Village West Marina	Yes	-	Yes	Yes	Yes	-
Village West Yacht Club	-	-	-	-	-	Yes
Walnut Grove Docks	-	-	-	-	-	-
Weber Point Yacht Club	-	-	-	-	-	Yes
Whiskey Slough Marina	-	-	-	-	-	-
Willow Berm Marina	Yes	-	Yes	Yes	-	-
Willowest Harbor	-	-	-	-	-	-
Wimpy's Marina	Yes	-	Yes	-	Yes	-
Windmill Cove Marina	Yes	-	Yes	Yes	-	-
Woods Yacht Harbor	-	-	-	-	-	-
Total Marinas = 97 of which:	34	19	29	41	35	18

Camping and Recreational Vehicle Facilities

In addition to the numerous camping and RV facilities available at the marinas, there are several other facilities in the Delta. These additional camping and RV facilities are listed in Table I-3 below, nearly all of which also have boat docks. In total, we identified 48 camping and RV facilities in the Delta. These camping and RV facilities were then verified as being operational telephonically.

Table I-3 Delta Camping and RV Facilities

Camping/RV Facility	Dock
Duck Island RV Park	Yes
Islander Mobile Park	Yes
Rio Viento	Yes
Sandy Beach Park	Yes
Santiago Island Village	No
Turtle Beach Preserve	Yes
Westgate Landing	Yes
Sub-total of Camping & RV Facilities	7
Sub-total of Marinas with Camping and RV Facilities	41
Grand Total Delta Camping and RV Facilities	48

Restaurants

In addition to the 29 restaurants part of, or locate in the marinas, there are 35 other restaurants in the Primary Zone and/or located in the Delta’s numerous Legacy Communities, totaling 64 total restaurants in these areas. The 35 restaurants are listed in Table I-4 below. These restaurants were then verified as being operational telephonically.

Table I-4 Delta Restaurants

Restaurant Name
Alma's Cafe
Al's Place
Foster's Bighorn
Giusti's #
Grand Island Mansion* #
La Posada
La Villa Mexican Restaurant
Lighthouse Restaurant
Locke Garden Restaurant
Lucy's
McDonald's - Rio Vista
Mel's Mocha & Ice Cream
Monarch Grill - Rio Vista Golf Club
Moore's Riverboat Restaurant and Bar #
Outrigger's Restaurant
Peter's Steak House
Pineapple Restaurant
Pirate's Lair Café

Restaurant Name
Pizza Factory - Rio Vista
Pizza Factory -Walnut Grove
Red Coach Deli
Rogelio's*
Rosa's at Tower Park
Rusty Porthole Restaurant #
Ryde Hotel* #
Spindrift Restaurant
Subway - Rio Vista
Sugar Barge Outdoor Bar & Grill
Taco Bell - Rio Vista
Taqueria Mexico Restaurant
The Point Waterfront Restaurant#
Tony's Place
Tortilla Flats
Wimpy's
Windmill Cove

Note: *=Hotel and #=Dock facilities

Boat Builders

We identified 8 boat builders in the Legal Delta, half as many as in 2008, which are listed in Table I-5 below. These Boat Builders were then verified as being operational and queried as to whether they provided boat repair services telephonically.

Table I-5 Delta Boat Builders

Boat Builders
Bridgehead Marine Services
Capri Quaris Marine Boat Works
Celestial Boat Works
Delta Watercraft Shop

Boat Builders
Diablo Boat Works
Farallon boats
FV Three J'S
Shaner Boat Works, LLC

Boat Dealers

We identified 35 boat dealers in the Legal Delta, which are listed in Table I-6 below. These Boat dealers were then verified as being operational and queried as to whether they provided boat repair services telephonically.

Table I-6 Delta Boat Dealers

Delta Boat Dealers
5 STAR OR, LLC
Antioch Yacht Sales
Bryan Marine Services, LLC
Cal Nor Mastercraft Inc
California Boat Lift Sales Inc
Carlson Marine
Cmk Mobile Marine
Confluence Marine, LLC
D'Anna Yacht Center Inc
Deckhand's Supply
Delta Marine Services
Delta Marine Services Inc
Get Your Ship Together Marine Services, LLC
Greenbelt Investments (ii) LLC
Honker Cut Marine Inc
Hydrohoist Marine Group, Inc.
Inland Marine Service
Kaimanu Outrigger Canoe Club

Delta Boat Dealers
Kokopelli Kayak Rentals LLC
Larson Marine Inc
Lintech Marine Services
Marine Industrial Services Inc
Marine Services
North River Marine Inc.
Pacific Yacht Imports
Performance Marine Specialties
S Bg Marine Center Inc
Sea-Brina Marine Detail LLC
Sporting Edge Ski And Marine
Sporting Edge, Inc.
Thornton Marine Service
Tracy Watercraft
West Marine - Pittsburg
West Marine - Stockton
Yachting Specialties Inc

Boat Repair Facilities

In addition to the boat repair services identified with marinas, boat builders, and boat dealers, there are several establishments whose primary business is boat repair. These boat repair establishments are listed in Table I-7. In total, we identified 36 establishments offering boat repair services in the Legal Delta, 15 separate establishments and 21 marinas with boat repair facilities. Boat repairers identified in the initial stage were further augmented with reference to the Delta Protection Commission's facilities list and the Delta Boating website. These additional boat repair establishments were then verified as being operational telephonically.

Table I-7 Delta Boat Repair Facilities

Boat Repair Facilities
Ament Marine Service
Bethel Harbor
Bridgehead Marine Services
Delta Boat Repair
Delta Marine Services
Diablo Marine & Trailer
J&H Marine
Kevin's Prop Shop

Boat Repair Facilities
Marine Emporium
Nordic Marine
Pacific Boat Services
PCS Marine
River City Boat Works
Vee Jay Marine Services
Williams Wood Craft



THE HENNE GROUP
Research. Strategy. Results.



Delta
Protection
Commission

Delta Focus Groups Project Report

June 15, 2020



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2. Executive Summary
3. Methods
4. Key Findings
5. Marina and Business Owners
6. Activity Participants and Underserved Community
7. Recommendations
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1. Objectives

Objectives

Evaluate and assess the state of recreation and tourism in the Delta

Gather insights regarding trends, successes, opportunities, weaknesses, failures, barriers, and potential solutions to the economic sustainability of Delta recreation and tourism

Understand how to protect and support existing businesses

Investigate existing business owners' ability to create a cohesive infrastructure and growth opportunities for recreation and tourism

Determine how to expand the current base of visitors in the Delta

Examine ways to expand the customer base of the Delta by listening to the interests, motivations, and challenges of current visitors as well as those living in the area who are less likely to recreate in the Delta (the Underserved)

Analyze awareness of current DPC and State programs

Evaluate the current knowledge of DPC and State programs such as the Great Delta Trail, National Heritage Area (NHA) designation, Delta Marketing Task Force, and the website VisitCADelta.com



2. Executive Summary

Executive Summary

Recreation and tourism industries in the Delta are still recovering from the 2008 Economic Crisis

- The effects of the 2008 Economic Crisis are still being felt by Delta businesses
- Keystone businesses that provide essential services have closed and not been replaced
- Marinas and businesses say they have begun recovering from the last crisis and even aimed for some expansion in 2020 – but this was before the effects of the COVID-19 pandemic were clearly known

Existing businesses need protection and support

- Basic Infrastructure needs to be repaired (roads), added (parking, public bathrooms), or cleaned up (abandoned vessels, buildings)
- Existing businesses and future entrepreneurs will need support from local and state agencies to reach previous levels of economic activity

Current Delta visitors are not diverse and that should change in order to expand

- Current visitors are older and mainly Caucasian
- There is a need to attract more diverse and younger visitors, while catering to families and residents
- There are few offerings in the Delta for younger generations

Most residents and visitors are not aware of the DPC and State programs

- Marina and business owners are only somewhat aware of DPC programs
- Activity participants and the underserved do not know about DPC or other programs
- DPC can play a crucial role in the sustainability of the Delta by engaging community members and local businesses



3. Methods

Methods (1)

- The Henne Group (THG) conducted **FIVE focus groups** from February to April 2020
- All groups were moderated by Jeff Henne, President and CEO of THG
- Each focus group lasted **two hours** and included 5 to 8 participants
- Due to the current COVID-19 pandemic, all focus groups were conducted **virtually**
- Three groups were conducted with Marina and Business Owners; two with consumers: one with current users of the Delta and one with non – users. This last group was referred to as the “Underserved Community”
- Recruitment for the Underserved Community group focused primarily on young, non-Caucasian, and low-income participants in contrast to the Activity Participants group



NE TOURISM BUSINESS OWNERS



SW TOURISM BUSINESS OWNERS



MARINA OWNERS



ACTIVITY PARTICIPANTS



UNDERSERVED COMMUNITY

Methods (2)

- Recruitment process:
 - **Some sample was provided** by the DPC and expanded by THG
 - For Marina and Business Owners, prospective respondents were recruited via **direct contact by phone or email**
 - For the Activity Participants and the Underserved Community groups, participants **were referred by community based organizations and activity groups**
 - **Social Media** posting and advertisements were also used
 - All participants completed an online questionnaire to determine eligibility
- Transcripts were prepared for each group discussion, and this report was prepared by THG's Sam Teegarden, Nyree Young, and Sergio Garcia



Challenges:

- Individuals were concerned about the current COVID-19 pandemic
- Virtual format was not appropriate for less tech savvy respondents
- Reaching businesses and organizations during off-season and COVID-19 shelter-in place

Opportunities:

- Since all groups were virtual, location was not an issue
- Participants were eager to take a break from COVID-19 related topics
- Business owners were highly motivated, because these were issues that directly affect their lives



4. Key Findings

Key Findings

Everyone agrees that the Delta is a hidden gem, located close to large metropolitan areas

Nature and access to water are the most appealing aspects of the Delta

There is a shared desire to increase number of visitors without changing the character of the Delta

Businesses had planned to expand, but very cautiously – this was mostly before the full impact of COVID-19 was known

Homelessness, litter, dilapidated boats & debris deter visitors and negatively impact businesses

The perception that the Delta is only for the summer season should change

There is a need for networking and collaboration between different businesses to offer full experiences

There is a need for the development of more inclusive and family friendly offerings

Essential facilities and businesses are difficult to find or missing

The future of the Delta depends on increasing interest and visitation from younger generations



5. Marina and Business Owners

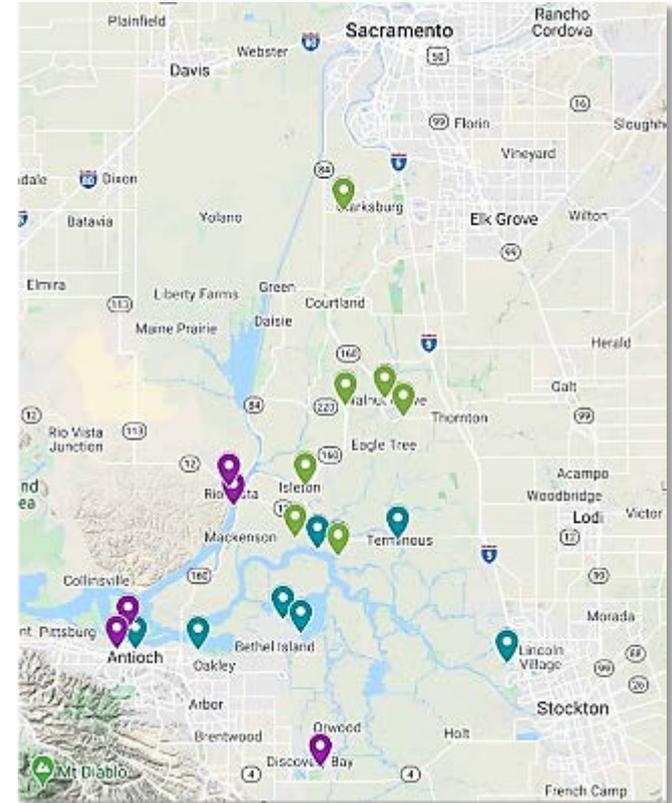
Marina and Business Owners (1)

Participants and Demographics

- A total of three group discussions were conducted, with five to eight participants per group
- Marina owners have been in the business **for a long time** (16 years on average) and most of them have seen changes in the Delta
- **A wide variety of business types** were represented in the two business owners' groups: a winery, a hotel, retail stores, museums, restaurants, water sports, and river tours
- More than half of these businesses reported higher customers per day during the summer season compared to the winter season



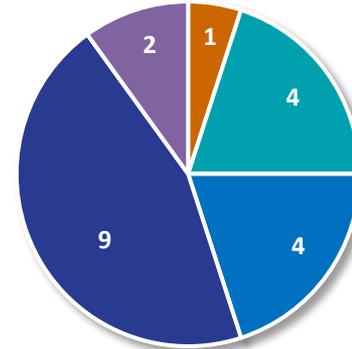
- Marina Owners 
- Business Owners (NE) 
- Business Owners (SW) 



Marina and Business Owners (2)

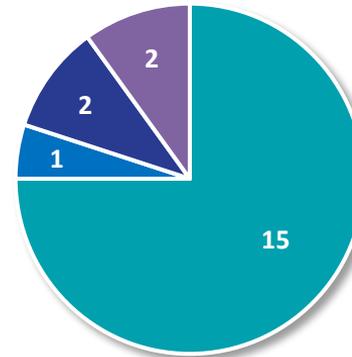
Participants and Demographics

- The majority of participants were **older**, over 50 years old
- Most have been living in the Delta for a long time and they **reminisced about the “glory days” of the area**
- Three quarters of participants were **White or Caucasian**



AGE

- 30-39
- 40-49
- 50-59
- 60-69
- 70 and older



RACE

- Caucasian
- African American
- Mixed Race
- Choose not to answer

Marina and Business Owners (3)

The CA DELTA from their perspective

- All participants were asked what they liked **MOST** and **LEAST** about the CA Delta

Delta Loop
Peaceful
Beauty
Hidden Gem
Family Fun
Nature Wild
Special
Quiet
Relax
Love
Reduced Blood Pressure
Different Experience
Backyard Playground
Middle of Everything
Best Kept Secret
No Phone Signal
Slow Pace
Natural
History
Serene
Scenic

"A lot of people are surprised by the beauty...the serenity... You can be right next to a million people on land, but you can be all alone on the river or inside islands."

Southwest Business Owner-02

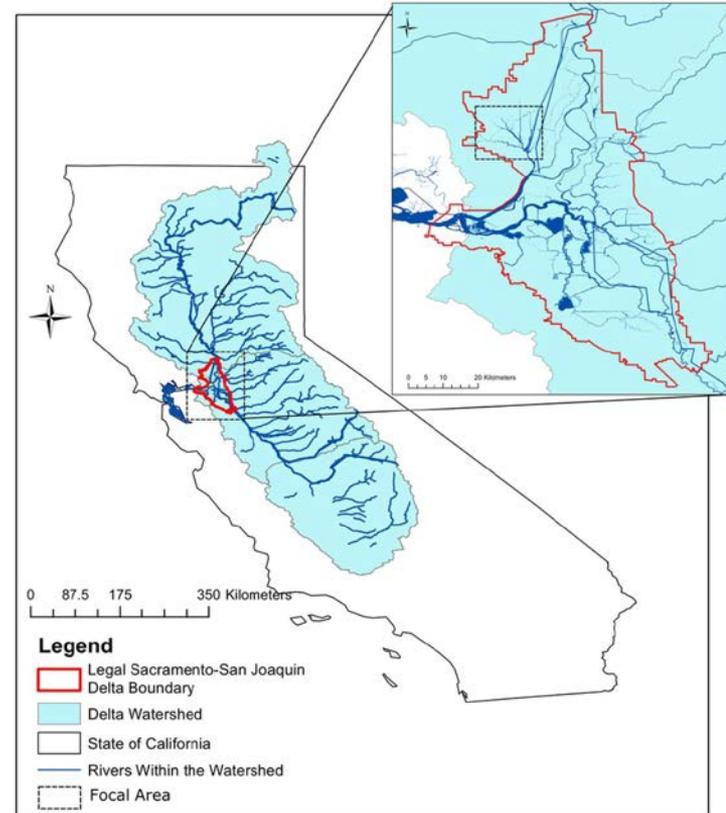
Business Closures
Water Quality
Regulations
Tunnels
Homeless
Traffic
Dilapidation
Access
Maintenance
Hyacinth
Run Down
Signage Theft
Dangerous Roads
Commute
Blight
Flood Insurance
Isolated
Employment
Debris
Mosquitos
No Law Enforcement

"What used to be thriving 15 and 20 years ago have been impacted by homeless encampments... for scenic viewers, they're horrible." **Northeast Business Owner-06**

Marina and Business Owners (4)

Strengths of the DELTA

- **Great location** in close proximity to SF Bay Area and Sacramento
 - Not inundated with typical Bay Area tourists
- **Rich in natural resources** and beautiful landscapes
- **Quiet and relaxing**: the perfect escape from urban areas
- **Diversity of offerings**: hiking, water sports, boating, wine tasting, museums



Marina and Business Owners (5)

Barriers for doing business in the DELTA

- Despite the Delta's beauty, several things prevent or hinder business growth:
- Lack of Awareness:
 - Most of the public **does not know** the Delta exists, let alone what to do
 - Some residents are **opposed to change** (over-development)
 - Seasonality: Many **individual activities are seasonal**, but the public is not aware that the CA Delta offers year-round recreational activities

"We really enjoying taking the inner-city population, officials, and business leaders out on the river and their reactions are always the same: "I had no idea this was here.""

Marina Owner-07



Marina and Business Owners (6)

Barriers for doing business in the DELTA

- Lack of Infrastructure:
 - **Roads** are in bad condition and traffic is heavy
 - Navigation applications (Waze, Google Maps) redirect traffic from highways, increasing congestion with no increase in business
 - **Essential facilities are missing** or hard to find: bathrooms and parking
 - **Amenities and services are inconsistent**: not enough restaurants, hotel accommodations, house boat rentals, unreliable hours of operation

“When people go to restaurants, they like to drink, but no one likes to drink and then drive an hour home.”

Northeast Business Owner-06



Marina and Business Owners (7)

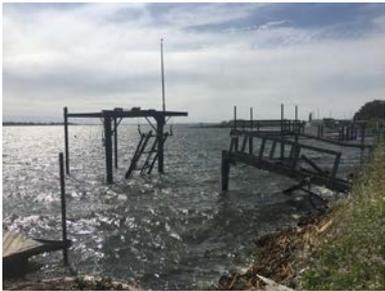
Barriers for doing business in the DELTA

- Economic Reasons:
 - Effects of the 2008 Economic Crisis are still being felt in the Delta
 - This is evident in the amount of businesses that closed during that time and had not been replaced, especially the boating industry and marinas
 - Hiring and other overhead **costs are too high**
 - Seasonal business: summer is incredibly busy, but during the off-season businesses depend on locals with lower spending power
- Appearance & Safety
 - **Homeless encampments** along and on the river are unappealing and deter visitors
 - Sunken boats, abandoned marinas and vacant storefronts make the region **less attractive** for visitors

"Dozens of times... I've hired somebody, they start... and then don't show up anymore."
Marina Owner-06

"Homeless people are... on the sides of the river...and in dilapidated boats anchoring out in the sloughs."
Marina Owner-07

"There has been an influx of people living on boats... These boats are prone to leaks and are abandoned when they partially sink. They become an eye-sore and it's very costly to get them pulled out."
Northeast Business Owner-07



Marina and Business Owners (8)

Barriers for doing business in the DELTA

- Ecological Concerns

- Tunnel Project
- Invasive and native plants
- Water Quality

“Two years ago they went in and dammed off the False Slough coming into Franks Tract... They’ve since removed that, but that’s a threat to the Delta that’s not going to go away.” **Marina Owner-01**

- Generation Gap

- **Average age of customer base is increasing** and a resurgence of young boaters has not been seen
- Younger customers prefer to **spend money on experiences** and have **less disposable income**
- Internet allows young people to **have many other choices when deciding what to do**: increased competition

“The future of the Delta depends on if construction on the tunnels is started. I don’t know how any Delta business will be able to function.” **Southwest Owner-02**

“Young people these days have so many choices... So instead of having that little run-about skiff that a lot of kids used to have, they’ve got their computers and they’ve got so many other choices to be involved in.” **Marina Owner-03**



Marina and Business Owners (9)

Future of doing business in the DELTA



- Marina and Business Owners talked about plans for **growth and expansion**
 - Most owners have plans to add more amenities, launch programs, make improvements, and even expand to additional locations, but all express **caution**

“So...a work in progress all the time. Financially being able to tackle one project at a time. So just bringing it back up-to-date a little bit. And so it’s a good thing.”

Northeast Business Owner-01

- Participants were asked what they thought the Delta would look like in 10 years:
 - **Fewer Functional Marinas** due to funding needed for maintenance and renovations; smaller boats; and new housing developments with water access that will decrease or take away business completely
 - Water quality and access to fast water threatened by **Tunnel and Frank’s Tract Projects**
 - Most participants **do not expect any drastic change** in the next 10 years
 - Most of these participants feel that year after year, large amounts of money are spent to “solve” the Delta’s problems, but that real results are seldom accomplished

“Dilapidated marinas... are not economically viable to be rebuilt... With the cost to build a new marina, we don’t really see an increase in competition; despite the public need.”

Marina Owner-07

“I don’t expect to see too much change. It’d be nice if the ugly boats and marinas were gotten rid of and more restaurants came in, but I don’t really see any of that happening.”

Northeast Business Owner-05

Marina and Business Owners (10)

DPC and State Programs Awareness



- Most marina and business owners **are aware of the DPC**, but the majority do not know what they are responsible for or they are confusing the DPC with other agencies in the Delta
- Most participants in these groups are not aware of the **Great Delta Trail**, but some respondents **express interest in the plans** and they hope it will **bring more foot traffic and visibility** to the area. However, other participants have doubts it would be completed
- Half of marina owners and most business owners are not aware of the **National Heritage Area designation** but after learning about it, **they appreciate** the federal assistance, but **concerns** about new regulations are raised
- All marina owners and almost all business owners are not aware of the **Delta Marketing Task Force**
- Almost all marina and business owners **are not aware of VisitCADelta.com** and a few name the **Delta Chamber of Commerce** website as a resource



[About the DPC] ... "We see them taking a lot of money to try to do a lot of studies, but I can't really say we've felt there's been any success in what they are doing for our businesses." Marina Owner-03



[About the NHA Designation] ... "You have to have the population here to support the businesses to stay. You have to have the infrastructure, the roads or the waterways and public docking for people to come in. So it's a combined effort, and I think this is a step towards that." Southwest Business Owner-04



6. Activity Participants and the Underserved Community

Activity Participants and the Underserved Community (1)

Participants and Demographics



- THG conducted one focus group with **current recreational Activity Participants** in the Delta and a second group with **the Underserved Community members living in the Delta with barriers to recreation**
- Activity Participants were older, more affluent and predominantly Caucasian; the Underserved Community members were recruited to be younger, low-mid income, and racially diverse

ACTIVITY PARTICIPANTS

- Mainly white, middle-class
- Most were forty years old and above
- Most drove in to participate in recreational group activities then drove back home, few stayed overnight
- Most visited the Delta several times a year to participate in activities and vacation

THE UNDERSERVED COMMUNITY

- Most were people of color, working class with at least one child
- All were between the ages of 20-39 years old
- Most lived in Stockton. Their recreation time in the Delta did not include an overnight stay
- Chose to vacation outside of the Delta

Activity Participants and the Underserved Community (2)

Attitudes towards the Delta

- All participants in these groups were asked what they liked MOST and LEAST about the CA Delta
- The results are similar to those that we saw with the Marina and Business owners

Nature
 Wildlife
 Peaceful
 Agriculture
 Spiritual
 Blessing
 Love
 Refreshing
 Reinvigorating
 Beauty
Gem
Water
Sunsets
Magical
Hidden
 Relief
 Source of Life
 Sightlines
 Wonderful
 Exciting
 Special

“When we ride out of Sacramento, it’s refreshing... reinvigorating... a spiritual experience for me when I ride... I don’t want to ride in an urban setting all day long.” **Activity Participant-02**

Tule Fog
 No Parking
 Public Access
Smell
Pollution
Homeless
 Struggling Businesses
 Not Family Friendly
 Lack of Facilities
 Dangerous
 Water Level
 Mercury in Fish
 Invasive Plants
 Litter
 Eyesore
 Dilapidation
 Waterfront
 Flooding

“There is no place like you can go and you feel safe.” **Underserved-01**

“From my...window, I can see the waterfront, and I can also see the homeless population... It’s an area I wouldn’t feel safe taking my nieces or nephews to. So I guess for me it’s more like a safety concern.”
Underserved-06

Activity Participants and the Underserved Community (3)

Recreational Use of the Delta

- Participants in both groups engage in a wide range of different activities in the Delta
- Activity Participants enjoy individual and group based activities that bring them to the Delta **multiple times during the year**
- The Underserved Community participants, mostly living and working in Stockton, enjoy activities that are more **family friendly** and less likely to pursue group based activities

Activity Participants are able to take day trips including looking for farm stands, different winery experiences, eating out, fishing, sculling, boating, and many are members of clubs (cycling club, kayaking club). They also enjoy camping on Sherman Island, Windsurfing, biking with cycling groups, sea kayaking, and duck hunting



Underserved Community participants have less free time, but they enjoy barbeques with family and friends, long drives in the car, and going to Paradise Point off of Eight Mile Road. Younger respondents stated that they also enjoy finding new bars. Respondents with large families, find eating out too expensive so they have picnics instead.

Activity Participants and the Underserved Community (4)

Recreational Use of the Delta

- Everyone has access to a car and **enjoy driving in the Delta** to admire the natural beauty of the region
- A few Activity Participants have stayed overnight, but many complain that there are not many options for overnight stays
- The underserved live nearby and no one had stayed overnight in a hotel or campground
- Both groups express an interest in **different food festivals** and other events



"We...enjoy... just going out there. And when you're on that... road out there to Herman & Helen's, and you see that sun setting...and you see Mount Diablo..., it's really nice. It's beautiful."

Underserved-04



Activity Participants and the Underserved Community (5)

Barriers to Recreating in the CA Delta

- Safety is a major concern for people who spend their leisure time in the Delta
 - The Underserved Community are concerned about the safety of their families due to **homeless encampments** in the Delta
 - Activity Participants are concerned about personal and group safety due to traffic and the **speed limit**. Cyclists report a lack of bike lanes and cycling specific signage
- Almost all underserved participants live in Stockton and talk about the **horrible smell** near the waterfront and in town
- **Price** is a major barrier for the Underserved Community, but activity participants are able to afford the equipment and fees for certain activities (kayaks, bikes, marina fees, etc.)

“The Delta is a lot more fun if you have a boat. Few of the folks in my generation have the financial means to own a boat. I’ve been looking for a friend with a boat for a long time.”

Activity Participant-08

“For it to be safe and open (for bike riders).. you need something safer than what’s available.”

Activity Participant-02

“The amount of crackheads and homeless people (at the Stockton waterfront), I didn’t feel safe with my daughter. So the Delta in rural areas is nice and it’s peaceful, and I do take my daughter there. But as far as the Stockton waterfront, it’s not safe.”

Underserved-08



Activity Participants and the Underserved Community (6)

Barriers to Recreating in the CA Delta

- All participants feel that there is a general **lack of infrastructure**, especially bathrooms with running water, parking, and according to the Underserved Community, barbecue or other designated areas to enjoy with their family
- **Water quality is an important concern for all respondents.** Many Activity Participants are very knowledgeable about proposed projects like the Delta Water Tunnel Project, and are concerned about its impact on water quality. The Underserved Community, even though they are somewhat less familiar with the technical facts surrounding these proposed projects, agree that water quality is fundamental for the Delta and indicate they are already not comfortable swimming in the water
- Visitors must navigate **winding levee roads in poor condition.** **Cyclists worry about their safety** when riding on the narrow stretch of roadways
- The Underserved Community participants are concerned about the appearance of some buildings and abandoned boats, describing them as old, dilapidated, and unappealing

"I haven't seen any restrooms, but maybe if they did have recreational areas where maybe they could develop restrooms."

Underserved-07



"I feel like...biking in the Delta is very dangerous. I don't let my kids do it, not even on Sherman Island. There's no bike lane or anywhere to bike, much less walk along the levee." **Activity Participant-03**

Activity Participants and the Underserved Community (7)

The Underserved: Specific Barriers

- Even though they live in the Delta, the Underserved Community **do not spend their free time** in the area for several reasons:
 - Many have concerns for safety and are **reluctant to spontaneously explore new areas**
 - There is a lack of facilities for making day trips easier (bathrooms, affordable choices for food, lack of public access to the water)
 - Many are looking for affordable options to spend their spare time – current food venues are seen as too expensive, water-based activities are also seen as beyond their reach financially
 - Younger individuals grew up with the perception that the Delta is polluted
 - **Non-Caucasian participants say they feel welcome** in the Delta, however, they also say that some Delta establishments (the marinas) are mainly frequented by Caucasians

“My grandmother and her siblings didn’t speak English, but we would go to the Delta and fish. So I think it’s enjoyable. But, again, I think it goes back to like whether it’s safe for them.” **Underserved-06**

“For pretty much anybody in Stockton, you’re going to be around immigrant families... but when I went to the marina resort-type places, it’s usually just Caucasian-American families there. But I do know that a lot of Asians, they do like to go fishing out there, but they’re not—they’re more just going off and just going fishing by themselves.” **Underserved-09**



Activity Participants and the Underserved Community (8)

The Underserved: Specific Barriers

- Individuals say it is **challenging to find online** events and places to recreate
- Everyone seems to enjoy local and community events, but due to a lack of promotion **they do not know how to find them**
- Even though most participants use social media and Google to search for activities and events, they recommend using **flyers in grocery stores, cafes, laundromats, and places where people gather** as the best method to promote events

"..when I would search, I was searching like hiking trails, or Big Trees will come or Yosemite will pop up. Nothing to do with like locally around my area." Underserved-07



"I follow a few pages like on Instagram. ... it's just promoting and advertising events or cool spots to go to on the Delta. Because I think a lot of people don't even know about spots on the Delta that they can go to. I think it's just lack of knowledge." Underserved-08

Activity Participants and the Underserved Community (9)

Future of recreating in the DELTA

- All look forward to seeing a better kept and cleaner Delta **without diminishing its character**
- All feel that **water quality** must be improved and protected in order for more people to recreate in the Delta
- Everyone eagerly awaits **improvements to infrastructure** including the Great Delta Trail for hikers and cyclists, parking near access points, and providing essential facilities

“I would never want the Delta to be developed. I love its rural nature, and I hope it stays that way. It would be nice if it was safer for cyclists. But when I’m there and I’m not getting buzzed by somebody, I am enjoying it. It’s very beautiful. I like it.” **Activity Participant-02**

“As far as planning hiking, we need parking, we need a restroom, we need a destination. And we can go out and back the same trail, which is like a lot of levees would be like that...We need a destination.”

Activity Participant-07



Activity Participants and the Underserved Community (10)

Future of recreating in the DELTA

- Creating more promotions, fundraisers, running competitions, other types of events, and festivals will bring more people into the Delta and **expose local residents to new activities**
- All feel that closer ties between local residents, Delta organizations and business would **enhance the sense of community**
- **Consolidation of organizations** trying to help the Delta
 - Avoid overlapping efforts and public confusion

“Promotions in my opinion would be the best way with if you’re one of the members of this hiking trip, you’re going to be able to enjoy this amenity.” Underserved-07



Activity Participants and the Underserved Community (11)

DPC and State Programs Awareness

- Activity Participants and Underserved Community participants were also asked about their awareness of the **Great Delta Trail**, the **National Heritage Area Designation** and the DPC's website, **VisitCADelta.com**
- There is a **general lack of awareness** of these programs and resources among participants
- Several Activity Participants are aware of the VisitCADelta website. The Underserved Community participants are not aware of the VisitCADelta website. When unaware participants were shown it in the groups they found it to **be very complete and useful**, and indicate they are very interested in using it in the future
- Many participants have the impression that there **are multiple, similar organizations** promoting the Delta so they do not have a clear idea of who is responsible for promoting the Delta

*[About VisitCADelta.com] ...
"There was talk about access,
and I don't know if everybody
knows about this website...
Whoever set it up and maintains
it gets three gold stars – it's
easy. It is really, really good."*
Activity Participant-01



[About National Heritage Area Designation] ... "I haven't heard of it, but I'm not exactly shocked. Given the native culture all over California, especially in San Joaquin Valley, it seems appropriate." **Underserved-06**



8. Recommendations

Recommendations (1)

Facilities and Maintenance

- **Water is the lifeline of the Delta**; it should be cleaned in order to appeal to new tourists and residents – this would include cleaning up abandoned boats
- **Launch clean up programs** for the regular removal of trash with the help of local businesses, organizations, and community members
- Develop infrastructure programs to **fix roads and restore dilapidated buildings**
- Expand **parking spaces, build more public bathrooms**
- Establish **safe biking lanes and hiking trails**



Recommendations (2)

Customers and Visitor Expansion

- **Facilitate communication between different businesses and marinas** so they can refer visitors between each other
- **Promote** to nearby urban residents the idea that the Delta is a place to unplug and connect with nature
- Create **full experience campaigns that include more than one** activity at a time: Instagram moments but with character
- Increase the **number of annual events** and advertise them within and outside of the Delta
- **Focus on and promote family activities** for current Delta residents such as competitions, marathons, family hikes, family meals



Recommendations (3)

Delta Protection Commission

- Become the one place to go for everything that is related to the CA Delta; create a reference directory for **“All Things Delta”**
- Collaborate with businesses and facilitate networking to create a **community of residents and local businesses**
- **Engage with the youth** and other diverse communities through apprenticeships in recreation, and summer camps or Master Classes
 - Master Classes are one-time events taught by experts where participants learn how to prepare a special meal, learn how to bottle their own wine or how to upkeep sailing boats
- Create the **DELTA Young Ambassador Program**. This would consist of younger individuals trained by the DPC to highlight locations, businesses, and events in social media. By creating videos in Tik-Tok and YouTube they could promote the Delta among their contacts from school, college or other social circles. Using their personal connections, they go beyond the traditional social media “influencer”.
- Promote the **combination of multiple services** and activities (e.g. rent a kayak, receive half-priced lunch)



9. Appendices