Septennial Report:

Galt Community Creek Clean Up Event: 2009-2015

Galt Community Park, Galt California 2009

Sacramento Area Creeks Council

June 2015

This report summarizes the valuable cooperative relationships between the Sacramento Area Creeks Council, citizens of the Galt community, the City of Galt (City), and local businesses that have supported activities to protect the environmental quality of the upstream tributaries to the Sacramento and San Joaquin River basins and otherwise local watersheds, specific to the City area, since 2009.

BACKGROUND OF FEDERAL AND STATE ENVIRONMENTAL PROTECTION LEGISLATION-AIR, LAND, AND WATER

With the flurry of four years post-World War II development and growth in the Nation, disposal to land and the related volume-reduction by burning, became one of the forms of managing the resulting solid waste. The effects on water quality, from such urban development prompted Congress, under direction of 33rd President Harry S. Truman, to pass the Federal Water Pollution Control Act (Clean Water Act) in 1948 to protect the environment. In 1965, the intersection of the development of urban centers and solid waste management pushed the management of solid waste into more of a "disposal to land and bury" approach rather than combustion when the Solid Waste Disposal Act of 1965 was passed by the legislature.

In California, the 33rd Governor Ronald Reagan, the first year of his term, took the lead in specifying air quality standards at the local level, by signing the Mulford-Carrell Act, in 1967; thereby setting off the series of environmental protection initiatives through the State of California (State). The Mulford-Carrell Act established the California Air Resources Board (CARB). The mission statement of the CARB was to protect air quality and public health and safety as well as to provide assistance to the growing industry, to use appropriate air management practices and remain in compliance with the new rules and regulations.

In 1967, the State passed the statutory water rights law by establishing the State Water Resources Control Board (SWRCB). The SWRCB integrated all the water resources management legislation that were formally being managed under other Federal and State agencies originally addressed in the 1948 Clean Water Act. By 1968 the United States had definitively committed to providing assistance in the Vietnam War lasting until 1975.

In 1969, legislation was passed, defining California's Water Code. This important Water Code was also known as the Porter-Cologne Water Quality Control Act. The Porter-Cologne Act, specifically §13000-16104, required each Regional Water Quality Control Board to create and enforce water quality control plans. Such plans include a basin plan for their specific jurisdiction. The basin plans, addressed in this report pertain to Sacramento and San Joaquin river basins controlled by the Central Valley Water Quality Control Board, Region 5.

In 1976, well into industrial development and one year post Vietnam War, the related build-up of the urban centers, the Resource Conservation and Recovery Act (RCRA) Subtitle D was passed by Congress specifically addressing environmental protection as a function of solid waste management in the Nation.

By the late 1960s the Federal government recognized the importance of following up on the goals set forth in the original Federal Water Pollution Control act of 1948 and created legislation specific to water basins. Title 40 of the Code of Federal Regulations, Part 131 created the Nation's Water Quality Standards. In 1980, the Comprehensive Environmental Response Compensation Liabilities Act (CERCLA) also known as Superfund, was passed to support Federal EPA-sponsored cleanup of toxic waste sites and pursue compensation from responsible parties.

NATURAL RESOURCES IN THE CALIFORNIA CENTRAL VALLEY

In 2009 the Delta Reform Act was passed to address specifically the availability of water resources to serve the needs of the citizens of California. As part of the Delta Reform Act, the Delta Stewardship Council published *The Delta Plan* which was one of the documents designed to support the 2009 Delta Reform Act for the California Legislature. The Delta Plan (Plan) was designed to dissolve the long standing political, social and economic issues in the State regarding the management of water resources. The Plan would eventually provide a resolution, including a long-term approach, to ensure that California's prime natural asset would continue to support all those who depended on the Sacramento-San Joaquin River Delta (Delta) water (Figure 1A Delta Floodwater Area Map).

The Plan was designed to ensure a reliable water supply for California as well as protect, restore and enhance the said ecosystems.

The Plan included six steps listed to support the goals of the Delta Reform Act:

1. Use water more efficiently in cities and on farms
2. Manage water from hydrologic events more efficiently
3. Revitalize the Delta ecosystems and provide adequate seaward flows/functional flows
4. Restore wetlands and riparian zones for the benefit of biological life
5. Restrict urban development and support farming and recreation activities
6. Establish adequate flood protection in the Delta

GALT: GEOGRAPHICAL LOCATION UPSTREAM FROM THE DELTA DOWNSTREAM FROM THE SIERRAS

The Galt community is geographically immune to becoming part of the highly managed Delta area. To this day its land use ordinances are still balanced with resource management and there exists no dire straits independent of statewide resource management. Notwithstanding the surface and groundwater resources, Galt has not been a contender in the struggle for water rights due to unregulated sociological, economic or political parameters and supports the major Dry Creek tributary. Although Galt and the adjacent communities are located upstream of the said Delta area, drinking water quality is a function of agricultural and developing suburban areas Statewide. The EPA-mandated drinking water quality control standards apply to areas such as Galt based on population. Since July 26, 2013 the Central Valley Regional Water Quality Control Board adopted the "final basin plan amendment" and Resolution, "R5-2013-0098" to include new narrative water quality objectives for two contaminants and the clarification of the water quality narrative for organic carbon. The two

contaminants most recently addressed in water quality narrative are cryptosporidium and giardia. While cryptosporidium is a microbial contaminant transported in surface waters mostly found in sewage and animal wastes it is now being regulated in water systems serving a population of greater than 10,000 persons. Giardia is transferred more by contact with contaminated environmental media and ingestion of the parasite itself and is a protozoa that survives in the intestines.

BALANCING CLIMATE CHANGE AND NATURAL RESOURCES WITH ECOLOGY IN THE DELTA

The rising sea levels will affect the Delta area which serves 25 million people equivalent to approximately 60% of the population. The system of levees and islands in the valuable Delta area are protecting both the Bay Area waters and Delta alike from fresh- and saltwater intrusion. Predictions have been made that increased seismic activity from the Hayward fault, rising sea levels, increasing temperatures, and a change in the Sierra precipitation will cause the Delta ecosystem to resemble more of an inland bay area such as the Suisun Bay. The water delivery system serving the Bay Area will be permanently disrupted. Along with changes in the freshwater downstream flow, both the native fish and invasive species will change in proportion to the changing ecosystem. The Delta smelt and longfin smelt which are on the brink of extinction would benefit from the flooding of the Central Delta area. The habitat for native brackish and freshwater species would increase if the Delta were to flood once again. The pumps would be shut down and water exports would stop. Freshwater species such as the Salmon and steelhead smelts may migrate through the Delta with ease.

On April 25, 2014 Governor Brown signed a proclamation of continued State of Emergency. Items 19 and 20 in the Executive Order suspended environmental review for specific project and suspended two slough tidal restoration projects, respectively.

FISH POPULATION AND INVASIVE SPECIES IN THE DELTA AREA

Since California is at the southern end of the domain for most salmonids, cold water fish including salmon and trout, scientists have been correlating the population and activity of these species to environmental management activities in the Delta. The Sacramento River chinook is one of the last large salmon populations in the West. The coho salmon is a sensitive anadromous fish that needs even colder streams for spawning and smelt development. These habitats are found in the Bay Area estuaries. Commercial fishing seasons were terminated when the Chinook numbers in the major Northern California Rivers were low as early as 2008. The low numbers in the fish population of the salmonids indicate climate change factors such as ecology and temperature. The hold-out species Steelhead numbers are no longer at normal levels either. Steelhead normally have a wider range in habitat conditions than the chinook and coho however they are proving to not be immune to the effects of water quality and resource management in their habitats due to land use and related unregulated development with regards to environmental impacts.

On the other hand invasive species that are already disrupting the integrity of the Delta will continue to expand and devastate the native fish, mollusks and crustaceans. Invasive species such as the overbite clams, freshwater Asiatic clam and Brazilian waterweed are just some of the invasive species that currently make their home in the valuable Delta waters.

The Department of Fish and Game maintains a "Threatened and Endangered Species Account" for fish. Currently there are 34 species on the list in the State of California. Two species are extinct: Thicktail chub and Tecopa pupfish. Five salmon species are threatened and endangered: Chinook-coastal, Chinook-spring run, Chinook-winter; Coho-Central California, Coho South Oregon/Northern California. There are five species of steelhead and four species of trout listed on the threatened and endangered species account (Figure 3).

STATE OF CALIFORNIA SOLID WASTE RESOURCE MANAGEMENT

In the 1980's the momentum for solid waste disposal to land had reached its peak and stricter land-use disposal statues were passed. On January 1, 1988, the California legislature adopted formal resource management procedures for solid waste management. At this time, the momentum of land disposal based solid waste management turned into a balanced effort of resource management focused on source reduction, recovery, and proper land disposal.

By the millennium, the solid waste management statutes reached a steady-state in evolution, similar to what was already addressed in water resources management, to include not only the environment but to address issues related to public health and safety at specified land uses related to resource management.

Today, almost two decades into the new millennium, the citizens of California have welcomed the latest government reforms in the form of regulations addressing the higher priorities of composting and development of renewable energy sources such as solar and wind energy and conversion technology as one of the alternatives to land-based disposal.

BACKGROUND OF SACRAMENTO AREA CREEKS COUNCIL (SACC)

The Sacramento Area Creeks Council (SACC) began as a few individuals addressing concerns of several different local land uses around native tributaries in Sacramento in the early 1990s. As of January 25, 2009 SACC was fully incorporated as a non-profit public benefit corporation committed to environmental protection stewardship. Well into its third decade, the SACC is committed to addressing the resource conservation and recovery of the tributaries that contribute to the greater bay area's freshwater supply.

Since the 1990s the SACC has worked with communities throughout Sacramento County to address issues in tributaries that are a direct result of land use in adjacent communities. SACC provides support to remove invasive species and municipally-derived solid waste, provide public education regarding water quality management, scholarships for students and grants directed towards elementary and middle school age environmental stewardship educational opportunities. The largest contribution to public education and awareness and creek-water quality is during the annual Creek Week facilitated in communities throughout the County by SACC volunteers. One of the most popular events during Creek Week is the Creek Clean Up event held on the weekend during Creek Week in April of each year.

Volunteers spend up to eight months during the year planning for the creek cleanup event. Staff solicit donations from local non-profits and private companies in the area. On the designated cleanup day SACC volunteers host a cleanup event at a creek or otherwise tributary to the watersheds in the area and committed citizens from the community participate in a large-scale effort to address the issues at such sites.

CONTRIBUTIONS OF THE GALT COMMUNITY TO PROTECTING THE GLOBAL ENVIRONMENTAL QUALITY-CARBON FOOTPRINT AND NATURAL RESOURCES

The citizens of Galt, supported by the City and local sponsors, for the past seven years, continue to support efforts addressing the proper management of their natural tributaries and otherwise storm management systems in the community in a very hands-on manner. The efforts to preserve the delicate ecological systems in the creeks by removing man-made materials and such are seen continuously throughout the year. The community of Galt has shown no lack of effort in supporting the water quality of the many tributaries contributing to the water supply through the delicate Delta-Bay conveyance to the great Pacific Ocean. The personal investment to reduce the carbon footprint and potentially harmful effects of climate change due to excessive carbon dioxide in the environment is taught at the school-age level in the educational system in the Galt Unified and Galt High School Districts. The high school graduates from the community of Galt will no doubt take their experiences from their teachers and community activities such as the creek cleanup event and it will naturally attenuate into their personal investment in global sustainability in their adult lifestyle choices.

Additionally, the Galt community support of environmental quality, parallels the water quality goals set forth in The Delta Plan.

Galt Community Park, Galt California 2012

In 2013 over one hundred citizens from the Galt community, gathered at three different tributaries, in the southern-most part of Sacramento County and on the boundary of the Sacramento-San Joaquin Counties (See Figures 1 Sacramento County Creeks and Figure 2 Galt Creek Cleanup Sites). Since 2009, the committed citizens of Galt have donned their rubber boots and gloves to pull large bulky wastes and smaller types of municipally-derived solid waste from the three tributaries in Figure 2. SACC volunteers work with the City of Galt Parks and Recreation and Public Works departments to coordinate the location of the cleanup sites. SACC volunteers also coordinate with private donors in the community to support the efforts at the Galt tributaries.

SUCCESS STORIES FROM THE SACC SPONSORED CREEK CLEANUP

On the whole, SACC volunteers organize up to 2000 volunteers to clean up approximately 81 different sites including approximately 35 miles of water ways. It is estimated that, on average, about 15 tons of municipally-derived and bulky waste is removed from the tributaries annually. As part of remediation efforts an estimated 40 cubic yards of globally invasive species such as the Himalayan Blackberry plant and Red Sesbania trees are removed annually at the cleanup events throughout the area.

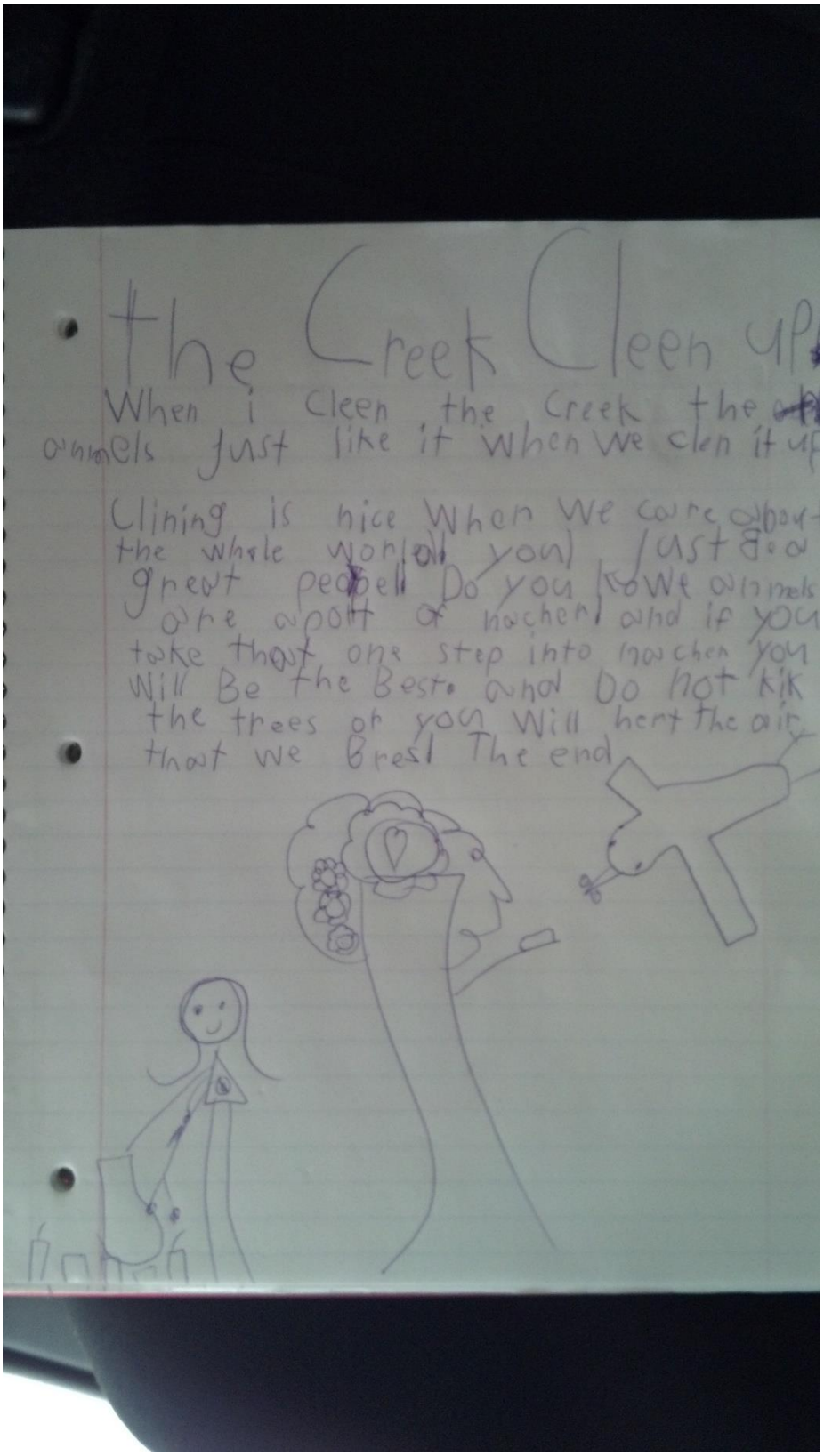
ACKNOWLEDGMENTS

The SACC volunteers facilitating the cleanup events want to extend great appreciation to the local businesses that have provided food, beverages to the participants and other resources at the cleanup events.

Sponsors to Galt Creek Clean Up events:

2012-2015	California Waste Recovery Systems	www.cal-waste.com
2009-2015	City of Galt Parks and Recreation Department	www.ci.galt.ca.us
2009-2015	City of Galt Public Works Department	www.ci.galt.ca.us
2013	Little Caesar's Pizza	www.littlecaesars.com
2009-2012	Raley's Corporation	www.raleys.com
2009	Starbucks	www.Starbucks.com
2009-2013	Sacramento County Diane Christensen	
2009-2013	Galt Herald, editor Paige Lampson	www.galtheraldonline.com
2009-2012	Galt Unified School District	www.gusd.k12.ca.us
2009-2012	Galt High Unified School District Jan Malmgren	www.ghsd.k12.ca.us

The SACC volunteers in Galt also want to thank the citizens of Galt that annually attend the cleanup events and who eventually will have contributed to the much larger effort of saving the oceans.



Galt Elementary Unified School District, Student Art, Creek Clean Up 2013

REFERENCES:

www.epa.gov

www.epa.ca.gov

www.waterboards.ca.gov

www.saccreeks.org

www.deltacouncil.ca.gov

2015 Delta Levee Investment Strategy

www.mywaterquality.ca.gov

www.calrecycle.ca.gov

www.leginfo.ca.gov

www.wikipedia.org

Martin, Glenn, "Take the Heat: Bay Area Ecosystems in the Age of Climate Change", www.baynature.org

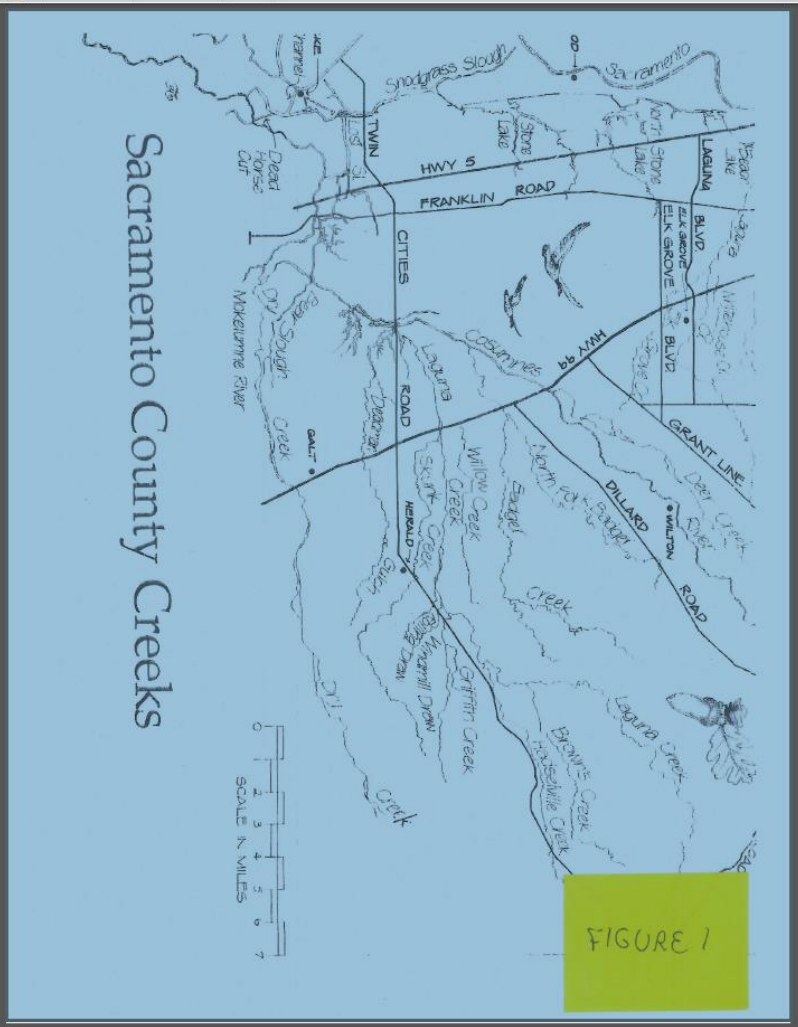
http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/fish.html

figures 1 and 2.pdf - Adobe Reader

1 / 2 75% Tools Sign Comment

Sabra Ambrose

Export PDF
Create PDF
Send Files
Store Files



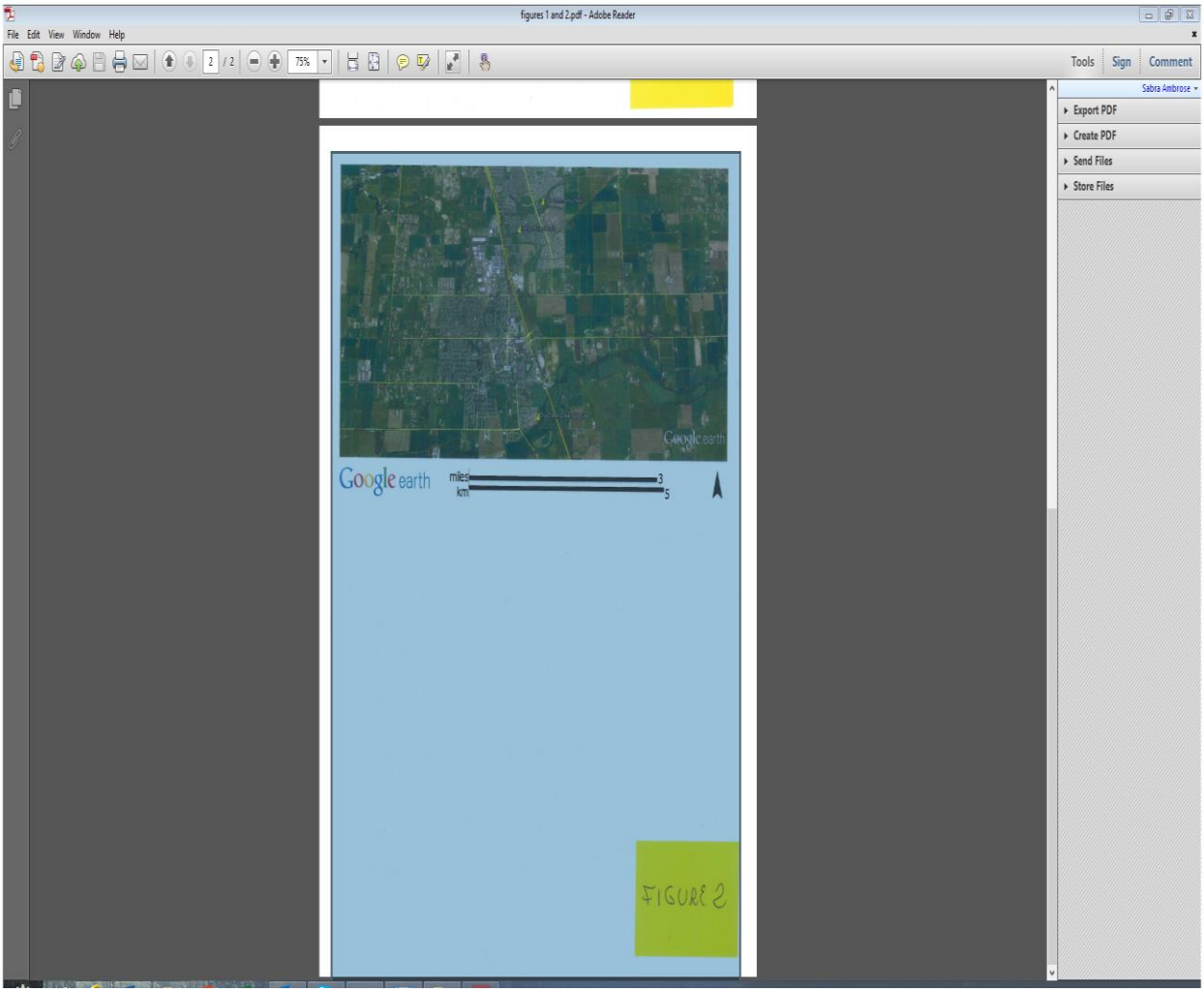

figures 1 and 2.pdf - Adobe Reader
File Edit View Window Help
Tools Sign Comment
Sabra Ambrose
Export PDF
Create PDF
Send Files
Store Files
Google earth
miles
km
3
5
FIGURE 2

FIGURE 1A DELTA FLOODWATER MANAGEMENT (WWW.DELTACOUNCIL.CA.GOV)

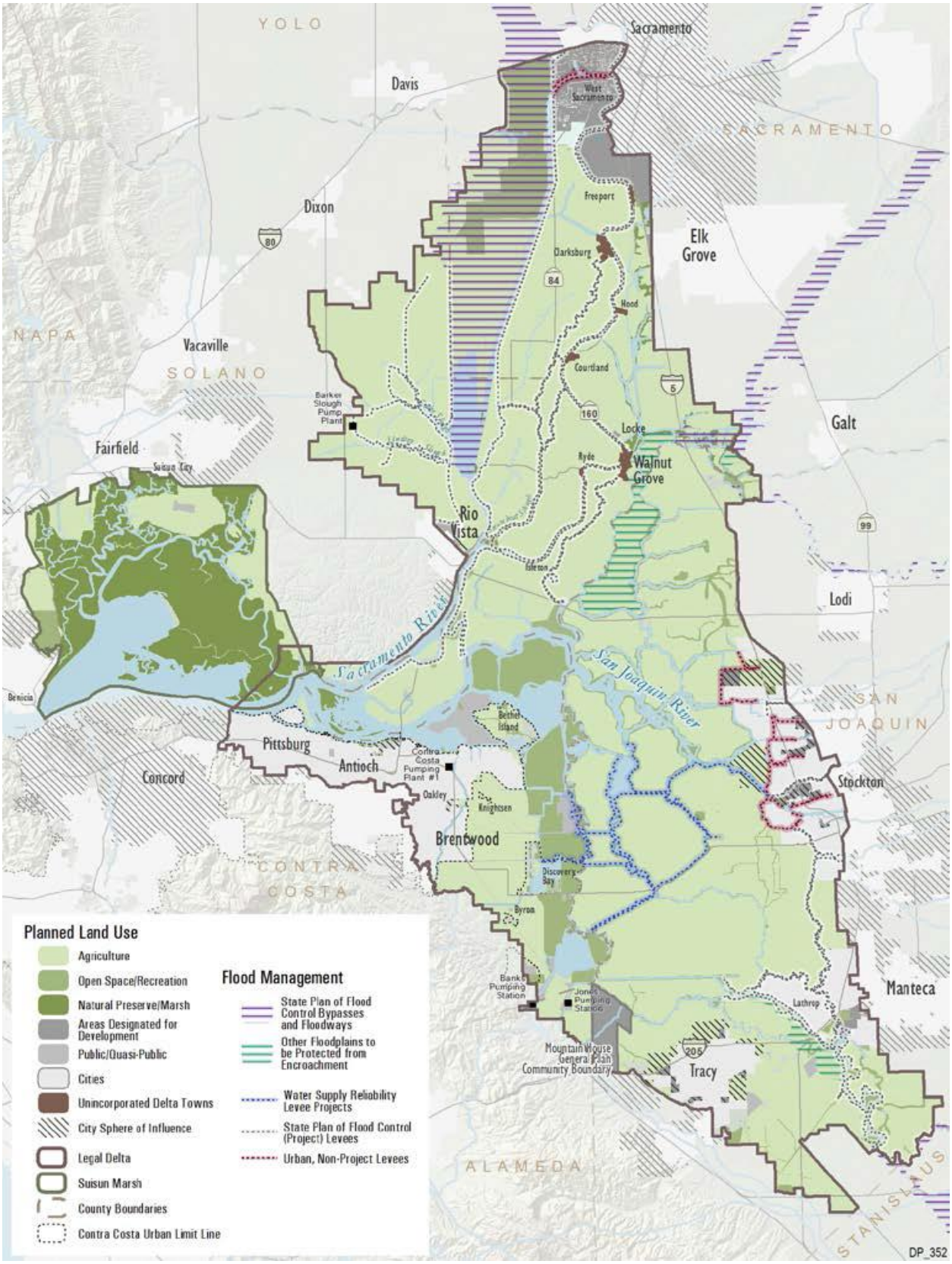


Figure 3 Threatened and Endangered Fish Species Account

Common Name	Scientific Name
bonytail	(*Gila elegans*)
chub, thicktail **(EXTINCT)**	(*Gila crassicauda*)
goby, tidewater	(*Eucyclogobius newberryi*)
pupfish, Cottonball Marsh	(*Cyprinodon salinus milleri*)
pupfish, desert	(*Cyprinodon macularius*)
pupfish, owens	(*Cyprinodon radiosus*)
pupfish, tecopa **(EXTINCT)**	(*Cyprinodon nevadensis calidae*)
salmon, chinook - California coastal ESU*	(*Oncorhynchus tshawytscha*)
salmon, spring-run chinook	(*Oncorhynchus tshawytscha*)
salmon, winter-run chinook	(*Oncorhynchus tshawytscha*)
salmon, coho - Central California ESU*	(*Oncorhynchus kisutch*)
salmon, coho - So. Oregon/No. California ESU*	(*Oncorhynchus kisutch*)
sculpin, rough	(*Cottus asperrimus*)
smelt, delta	(*Hypomesus transpacificus*)
splittail, Sacramento	(*Pogonichthys macrolepidotus*)
squawfish, Colorado (=Colorado pikeminnow)	(*Ptychocheilus lucius*)
steelhead - Northern California ESU*	(*Oncorhynchus mykiss*)
steelhead - Central California Coast ESU*	(*Oncorhynchus mykiss*)
steelhead - South/Central California Coast ESU*	(*Oncorhynchus mykiss*)
steelhead - Southern California ESU*	(*Oncorhynchus mykiss*)
steelhead - Central Valley ESU*	(*Oncorhynchus mykiss*)
stickleback, unarmored threespine	(*Gasterosteus aculeatus williamsoni*)
sucker, Lost River	(*Deltistes luxatus*)
sucker, Modoc	(*Catostomus microps*)
sucker, razorback	(*Xyrauchen texanus*)
sucker, santa Ana	(*Catostomus santaanae*)
sucker, shortnose	(*Chasmistes brevirostris*)
trout, Bull	(*Salvelinus confluentus*)
trout, Lahontan cutthroat	(*Oncorhynchus (= Salmo) clarki henshawi*)
trout, Little Kern golden	(*Oncorhynchus (= Salmo) mykiss whitei*)
trout, Paiute cutthroat	(*Oncorhynchus (= Salmo) clarki seleniris*)

tui chub, Cowhead Lake	(*Gila bicolor vaccaceps*)
tui chub, Mohave	(*Gila bicolor mohavensis*)
tui chub, Owens	(*Gila bicolor snyderi*)
* = Ecologically Significant Unit	

www.dfg.ca.gov