TESTIMONY OF MARTIN R. MCINTYRE
GENERAL MANAGER
SAN LUIS WATER DISTRICT

S-1759, WATER TRANSFER FACILITATION ACT OF 2009

Presented to the
Subcommittee on Water and Power
U.S. Senate

November 5, 2009

Chairwoman Stabenow, honorable members of the Committee: Good afternoon, I am Martin McIntyre, General Manager of the San Luis Water District, and I greatly appreciate the opportunity to appear before you today.

I am here in support of S. 1759, the Water Transfer Facilitation Act of 2009. I frequently speak on behalf of the San Luis Water District but today I also represent the hopes and needs of a much larger constituency including cities, industry, thousands of family farms, their employees and many water districts served by the Central Valley Project (CVP).

I was asked to testify before this committee because the San Luis Water District will live or die by the success or failure of water transfers. In 2009, with only 10 percent CVP allocation, failure to transfer adequate supplies of supplemental water would have resulted in the loss of tens of thousands of acres of high value permanent crops. I have been personally responsible for oversight of numerous transfers and negotiating the withering gauntlet of agreements, administrative approvals, and regulatory processes required for a one time single year transfer.

The social and economic tragedy that has been unfolding for years is now upon us. In 2009, a combination of prior regulation, three years of below normal precipitation and new Endangered Species Act regulations have resulted in a meager 10 percent allocation of CVP contract supplies to districts lying south of the San Joaquin/Sacramento Bay Delta (Delta). Over 500 square miles of productive land has been fallowed, threatening farms, families, cities and counties with unprecedented economic hardship.

Worse still, the US Bureau of Reclamation has advised that in 2010 we will receive only 10 to 30 percent water supply allocation under average hydrology and only 25 to 40 per cent allocation in the wettest of years. Prior to Biologic Opinions (B.O.s) rendered in the past two years, south of Delta CVP allocations averaged 65 percent. Current hydrologic modeling forecasts a decline of average annual allocations to 35 percent as a consequence of the recent smelt and salmon B.O.

California's water supply is in crisis. The Delta is in crisis. Numerous species, habitat and levees are all in serious decline. Twenty-five million people and 3 million acres of prime agriculture depend on water supply from the Delta. There are many troubling causes for decline of Delta species including:

- Collapse of the food web
- Toxic runoff
- Invasive species
- Thousands of unscreened water pumps throughout the Delta
- Changes ocean conditions

Despite all these other critical impacts, decline of Delta aquatic species has been historically blamed on the State Water Project and Central Valley Project pumps that support much of the State's population and agriculture. Until we address the primary causes of Delta decline, California's water supply security will continue to erode.

Under these increasingly dire circumstances, we cannot survive without exercising all available tools, including the tools to be provided by S 1759, the Water Transfer Facilitation Act of 2009.

Central Valley Project water users support S. 1759 because it would expedite our ability to employ water transfers as one tool to make the best use of our limited supplies. We thank Senator Feinstein and Senator Boxer for introducing this legislation. Congressmen Jim Costa and Dennis Cardoza have introduced companion legislation in the House, and we urge Congress to move forward on these bills as soon as possible.

S 1759- What it Would Do and What it Would Not Do

In the Central Valley, irrigation districts and water agencies have for decades exchanged and transferred water to each other as a means of getting surplus water to water short areas. These water transfers are regulated by California water law and by federal and state environmental laws, including the Endangered Species Act (ESA) and the National Environmental Quality Act (NEPA). Transfers of water in federal Central Valley Project are subject to an additional level of regulation under the Central Valley Project Improvement Act 1992 (CVPIA).

One of the major purposes of the CVPIA was to "assist California urban areas, agricultural water users, and others in meeting their future water needs." (CVPIA, Section 3405(a)). The law affected water transfers in three major ways. First, it allowed, for the first time, CVP water to be sold by individual water users to entities outside the CVP service area. The authors of the legislation intended this provision to "open up" CVP supplies to major urban areas, such as Los Angeles, and generate revenue for CVP environmental restoration through transfer fees. Second, it allowed certain water-rights holders in the San Joaquin and Sacramento Valleys to transfer water made available to them by the CVP under settlement contracts with the federal government. And third, the CVPIA made these newly-authorized transfers subject to review and approval by the Interior Department, through the Bureau of Reclamation, according to a set of criteria written into the Act.

The CVPIA has not achieved its goal of facilitating water transfers to help Californians meet their water needs. The envisioned transfers of water out of the CVP service area to urban water agencies have not occurred for several reasons, including environmental restrictions on the Bay-Delta pumps. Transfers among agencies within the CVP service area have been slowed and even discouraged by the Bureau's application of CVPIA.

Before the Act, water agencies within the CVP routinely transferred water among themselves, often on short notice, in compliance with state law. Now, those transfers are subject to months of review by the Bureau. Moreover, CVP users believe that the Bureau is misinterpreting the CVPIA by applying the water transfers criteria intended only for the new transfers specifically authorized by the Act to historical transfers within regions of the CVP. The result is that some once-routine transfers are now not possible.

S. 1759 is intended to facilitate water transfers among agencies within the CVP south of Delta service area by removing some of the bureaucratic impediments that discourage transfers or make them unnecessarily slow by doing the following:

- First, Section 2(a) of the legislation would deem that transfers among water districts within the same region of the CVP south of the Bay-Delta have met the two CVPIA criteria (3405(a) (1) A and I) that were originally intended for only transfers outside of the CVP, for transfers between the Sacramento and San Joaquin Valleys and transfers from the Settlement Contractors.

  The purpose of the criteria is to ensure that agencies transfer only water that they actually have and could otherwise use so that transferring agencies do not impact the supplies of other water users. These "consumptive-use" and "historic-use" safeguards make sense for transfers that would move water through the Delta from the Sacramento Valley to the San Joaquin Valley or to a region entirely outside of the CVP service area. But they don't make sense for transfers among agencies within the same region that are sharing the same limited regional water supply.

- Section 2(a)(1) of the bill deems that the CVPIA "consumptive-use" and "historic-use" criteria are met by transfers among CVP water agencies ("contractors") in specific Divisions of the Project south of the delta. This would allow some south-of-delta agencies to make water available for transfer they otherwise may not have made available under the Bureau's interpretation of the two criteria and in general are wet year excess water. This provision would apply only to transfers among agencies south of the Delta. Transfers through the Delta and transfers to outside agencies beyond the CVP service area would still have to meet criteria in (3405(a)(1)A and I) of CVPIA .

- Section 2(a)(1) of the bill deems that the criteria are met by transfers between CVP contractors and other agencies that are within the same CVP Division and hold temporary CVP water supply contracts or once held temporary or long-term CVP water supply contracts. These are non-CVP irrigation districts within the service area of the Friant Unit of the CVP and intermingled with Friant districts. They receive water from the Kings, Kaweah and other rivers that flow through the Friant service area, and overlap the same groundwater aquifers as Friant districts. Temporary CVP contracts allow them to buy flood water from the CVP, when it's available.

  Transfers among Friant CVP contractors and neighboring non-CVP districts have historically been used to make the best use of groundwater storage opportunities. The Bureau's application of the CVPIA consumptive-use and historic-use criteria to these water-management transfers has made them more difficult, and in some cases impossible. S. 1759 would ease this impediment and allow for improved management of surface and groundwater supplies.

- Section 2(b) (1) ensures that any transfer affected by S. 1759 not interfere with implementation of the San Joaquin River Settlement.

- Section 3 of the bill would facilitate transfers within the entire CVP by directing the Interior Department to use existing authority to develop a programmatic environmental review of CVP water transfers. All CVP water transfers are subject to review under ESA and NEPA and currently a new review, stand-alone environmental review for each transfer even though many of the elements examined are common to most transfers. A programmatic approach allows the regulatory agencies to develop a framework addressing these common elements so that they don't have to be examined anew for each transfer. Individual transfers would still be subject to separate environmental reviews, but reviews could be done faster within a programmatic framework.

S. 1759 would not create any new water transfer authorities. It would not waive or short-cut reviews of transfers under federal or state environmental laws, and it would not reduce revenues from environmental fees paid into the Central Valley Project Restoration Fund. It does not affect reviews of north-south transfers through the Delta or outside of the CVP.

S. 1759 also does not create new water. It removes some of the hurdles and expedites the efficient transfer and management of dangerously short and unreliable water supplies. Transfers help us buy time until long-term solutions are developed to return adequate and stable water supplies to California agriculture. But time is running dangerously short.

S 1759 does not create "Paper Water": When the transfer provisions of the CVPIA were being assembled, it was clear that transfers of CVP water that had historically been provided to certain CVP contractors in settlement of water right issues associated with the development of the CVP, were going to be in play in terms of the new transfer capabilities to be provided by the proposed changes in law. In particular, the ability to transfer Sacramento River water rights settlement water supplies, as well as water supplies provided in settlement or exchange of San Joaquin River water rights, were now proposed to be able to be transferred.

There was concern among existing CVP water service contractors from throughout the Project that some of this transfer potential for water rights settlement water supplies could adversely impact the availability of their CVP contract water supplies as some of the established water right settlement contract amounts had never been all put to use. To the extent this water hadn't been put to use, it would be available for use as Project contract yield to the CVP water service contractors. Similarly, there were Municipal and Industrial CVP contracts that were still in a "build up" period that had a history of not using all of their CVP contract entitlement which raised similar concerns among the other contractors relative to the potential for transfers to occur with water that did not have a history of being put to use (e.g.. the term "paper water").

Thus, the conditions associated with both Sections 3405(a)(1)(A) and 3405(a)(1)(I) were intended to protect CVP contractors from the potential that water which never had a history of being used (and thus was available to become part of the CVP yield for the balance of the CVP contractors) could now be transferred. The proposed changes modifying the application of these two sections of the CVPIA contained in the subject legislation would only apply to transfers as between CVP contractors south of the Delta

(San Luis, Delta-Mendota, Mendota Pool, Cross Valley, San Felipe and Friant Divisions). The potential for "paper water" transfers for CVP contractors south of the Delta has never existed and does not exist today. While temporary surpluses of water for an individual contractor may exist from time to time (due in particular to local annual hydrologic conditions) there are no contractors that have contract entitlement amounts that otherwise go unused unless transferred. This is especially true under the water shortage conditions that exist for all CVP contractors south of the Delta resulting from reduced Delta pumping for protection of endangered species or resulting from new releases of water for San Joaquin River restoration. Thus, the proposed language does not increase the potential for "paper water" transfers. However, it does remove a significant impediment that was inadvertently created with the passage of the CVPIA and the unfortunate application of Sections 3405(a)(1)(A) and 3405(a)(1)(I) to transfers that used to occur with limited review which now are virtually precluded from occurring, all at a time when a great need exists to move water within the Project due to the previously mentioned conditions of water shortage.

The San Luis Water District- A "Westside" District

The San Luis Water District (SLWD) serves 66,000 acres located on the western side of the fertile San Joaquin Valley (See Figures 1 & 2). Historically, adequate supplies of water, fertile soils, an ideal climate and innovative farming practices have been combined to produce superior yields of high value crops which feed both the country and the California economy. In the past ten years there has been a growing shift from row crops to permanent crops (trees and vines).

SLWD irrigation facilities are among the most efficient anywhere. District facilities include 52 miles of pipelines, 14.3 miles of lined canals and only 3.3 miles of unlined canals. SLWD does not own or operate any wells. On-farm irrigation efficiency is estimated to average greater than 80%. Water use efficiency in San Luis Water District includes the following features:

- Over 96 percent of the distribution system is piped or lined
- Over 80 percent of the irrigated lands are served by drip or micro systems
- Less than 8 percent of irrigated lands are served by furrow and flood irrigation
- 100 per cent of District and grower turnouts are metered
- 100 per cent of on farm tail water retained/reused
- Zero spill at conveyance system terminus points

Despite this extremely efficient system, in 2009 about 25 percent of the District irrigable land has been fallowed and over 80 percent of annual crops have been abandoned due to cut backs in water supply. Even more ominous, the survival of permanent crops and family farms now hang in the balance.

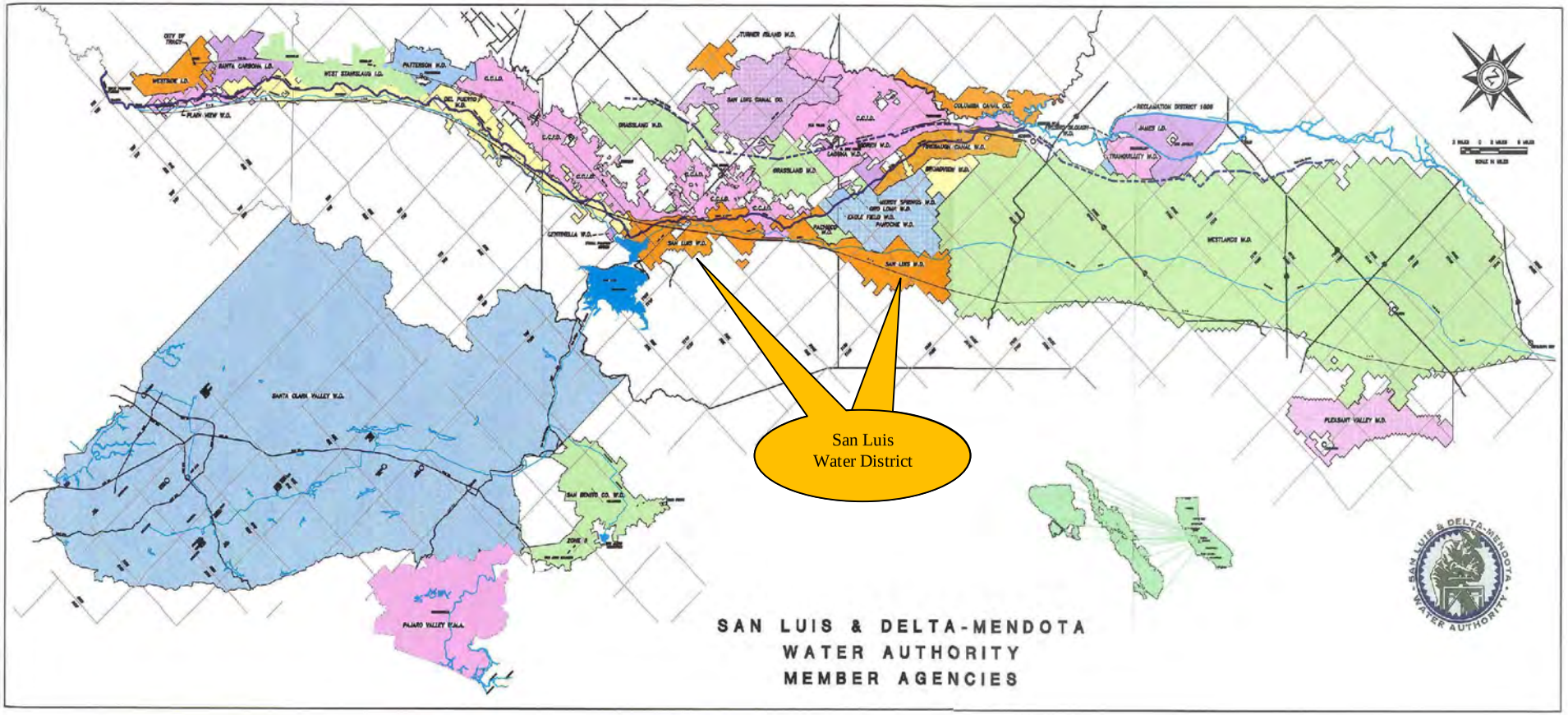
San Luis
Water District
SAN LUIS & DELTA-MENDOTA
WATER AUTHORITY
MEMBER AGENCIES

Figure 1

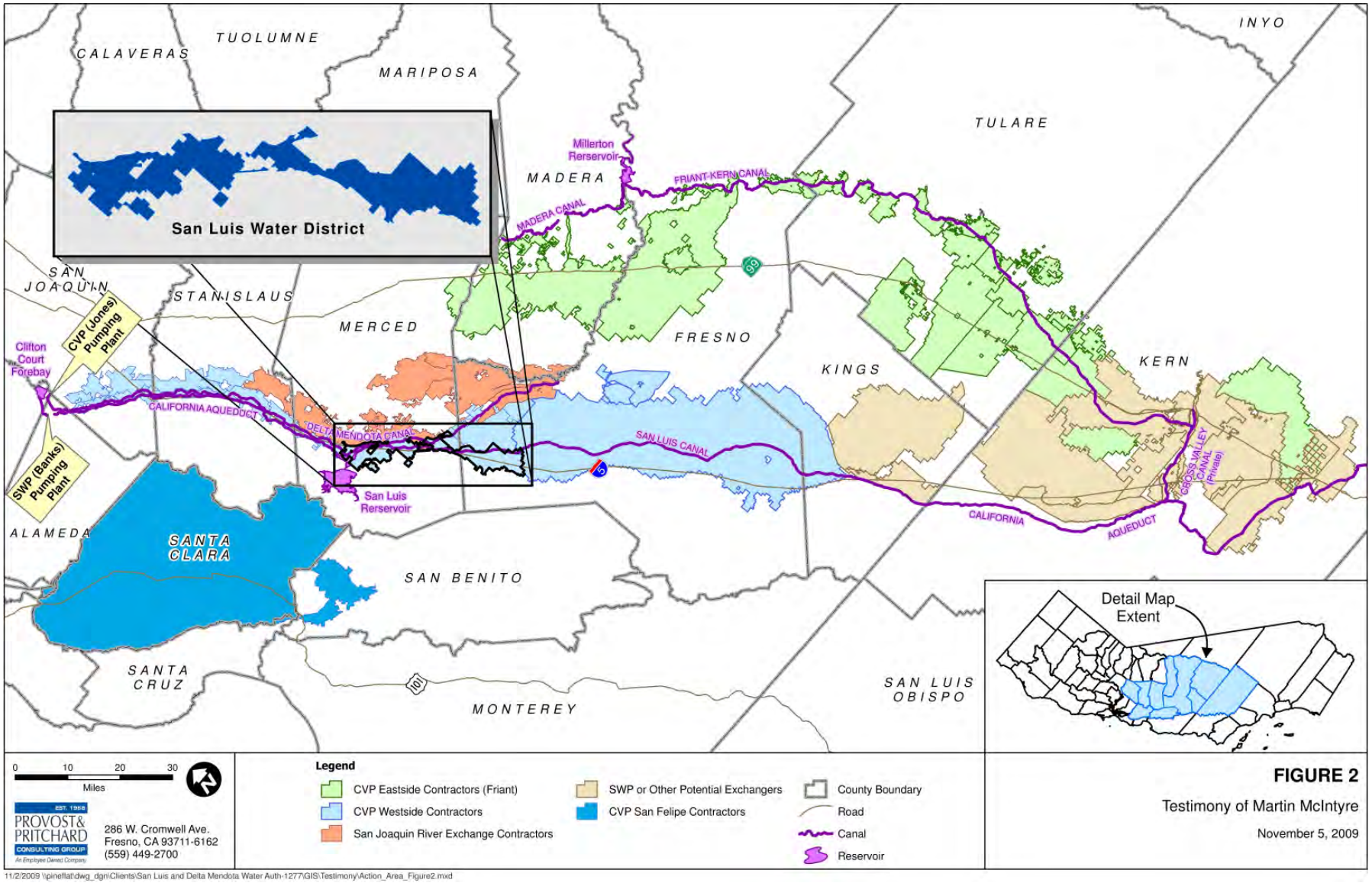

FIGURE 2

Testimony of Martin McIntyre

November 5, 2009

11/2/2009 \\pineflat\dwg_dgn\Clients\San Luis and Delta Mendota Water Auth-1277\GIS\Testimony\Action_Area_Figure2.mxd

San Luis Water District's only long term source of water supply is a contract with the US Bureau of Reclamation (Reclamation) for up to 125,000 acre feet per year from the San Luis Unit of the Central Valley Project (CVP). Groundwater is extremely limited and generally of very poor quality. Due to factors discussed below, our CVP supply has become so unreliable that high value permanent crops are at serious risk. A single water short year could result in loss of permanent crops and associated capital investment.

The Westside CVP

The SLWD is situated roughly in the middle of a 3,300 square mile region of the California San Joaquin Valley generally known as the Westside of the San Joaquin Valley. This region (about the size of Delaware and Rhode Island combined) is located south of the California Bay-Delta (Delta) and extends roughly from the City of Tracy in the north to Kettleman City in the south and generally bordered on the east by the San Joaquin River and extending to the west into San Benito and Santa Clara (Silicon Valley) counties.

Common to SLWD and 28 other Westside water purveyors south of the Delta are CVP water supply contracts administered by the Reclamation. The CVP is the largest single water project in the nation. The Project provides water for farms, homes, factories, and the environment. It produces electric power, and provides flood protection, navigation, recreation, and water quality benefits from California's great Central Valley to major urban centers in the San Francisco Bay Area. Water provided by the CVP to the Westside serves more than 1.3 million acres of highly productive farm land, 1.7 million Californians from small rural towns to the "Silicon Valley", and countless waterfowl dependent upon more than 100,000 acres of important wildlife management areas situated in the Pacific Flyway.

West Side Water Supply Impacts

For over 15 years, Central Valley Project contractors -- particularly agricultural service contractors on the Westside of the San Joaquin Valley such as the San Luis Water District -- have been experiencing a steady decline in both the volume and reliability of their water supply. Beginning with the listing of winter-run Chinook salmon in 1989, followed by implementation of the Central Valley Project Improvement Act and Clean Water Act, the region endured a gradual decline in average annual CVP water allocations from nearly 100% prior to 1989 to current estimates of only 35%. As discussed below, this has severely strained the social and economic fabric of communities throughout the Westside.

Supply Management and Water Use Efficiency:

In order to cope with this water supply decline, water districts and farmers throughout the Westside implemented new management practices, technologies, and strategies to improve the efficiency of their water use, conserve supplies, and acquire supplemental water. These changes have garnered worldwide attention and have established the Westside as the most water efficient agricultural producing region in the world.

The following strategies have been widely adopted throughout the area:

Conservation – Tens of millions of dollars have been invested to conserve water so that it can be spread to as many acres as possible. Drip irrigation for permanent crops is standard and is also being implemented on a broad scale for row crops. Canals and ditches have been lined to reduce losses; low interest revolving loan programs have been implemented to encourage investment in conservation and water reuse.

Transfers – Transfers are active at the farm, district and Authority regional level. However many types of transfers require long lead times and entail uncertain approvals. Inter-region transfers are contingent upon Delta export pumping capacity, which has been virtually eliminated by recent B.O.s

Crops – In order to afford the investments in conservation and to be able to compete in costlier water markets, farmers have had to convert to high value vegetable and permanent crops. Trends over the last 15 years have shown a gradual and consistent conversion.

Groundwater – Unfortunately, groundwater in the region is generally spotty in both availability and quality. Monitoring programs have been implemented to track groundwater levels, drawdown, recovery rates and subsidence to determine sustainable yield and to maximize sustainable use.

Land Fallowing/Retirement – Unfortunately, even after aggressively implementing conservation, transfers, and groundwater programs there hasn't been enough water available to irrigate all of the 1.1 million Westside acres. 300,000-400,000 acres have been idled either by farmers consolidating their supplies or through district programs.

Despite the foregoing effort, recent, rapid, and successive federal Endangered Species Act actions have crippled the effectiveness of much of these prior strategies and investments due to severe operational limitations that have been imposed on the CVP by the FWS and NMFS to protect ESA listed delta smelt, Chinook salmon, green sturgeon, steelhead, and Southern Resident killer whales. These limitations dramatically reduce the Westside's ability to supplement its chronically short contract supplies of water with traditional transfers from the north to the south.

Rededication of CVP & SWP Water Supplies Since 1992

Regulatory Action	Water (af) Reprioritized	Cummulative Impact (af)
ESA - Shasta "Cold Water Pool"	-500,000	
Central Valley Project Improvement Act "B(2)"	-800,000	-1,300,000
CVPIA "Level 2" Refuge Supply	-422,000	-1,722,000
CVPIA Trinity River Restoration^	-400,000	-2,122,000
CWA - Water Quality Control Plan	-100,000	-2,222,000
2008 Fish & Wildlife Service "Delta Smelt" Biological Opinion	-750,000	-2,972,000
2009 National Marine Fisheries Service "Salmon" Biological Opinion*	-450,000	-3,422,000
Total CVP & SWP water rededicated for environmental purposes~		-3,422,000

^ Estimate of average; actual range is 369,000 to 815,000 acre-feet/year depending upon year type.

* Preliminary analysis; does not include upstream impacts.

~ Volume does not include potential longfin smelt impacts.

Regulatory Actions and the Future of Westside Agriculture:
In December 2008, the FWS issued a new Delta Smelt opinion on the continued operations the CVP and SWP. No estimate has been produced as to the population level benefits of the actions imposed by the FWS; however, adverse impacts upon the water supply of the CVP and SWP are generally agreed to average approximately 750,000 acre-feet of water per year. Numerous suits have been filed over the new opinion.

In June 2009, the NMFS issued a new opinion Salmon, Steelhead and Green Sturgeon opinion further impacting the continued operations the CVP and SWP. No estimate has been produced as to the population level benefits of the actions imposed by the NMFS; however, adverse impacts upon the water supply of the CVP and SWP are estimated to average 450,000 acre-feet of water per year. Numerous lawsuits have been filed over the new opinion.

Many in the academic and non-federal scientific communities point to impacts being caused by factors other than the CVP and SWP exports, such as invasive species, pollution, the thousands of non-CVP and SWP diversions, legal and illegal harvest, ocean conditions, and climate change. Lately, the federal fish agencies have begun to acknowledge that these other factors are contributing to the decline of species. But despite a growing body of scientific evidence demonstrating the significance of these other factors, they have done nothing either to estimate their importance or, more importantly, to curb their impact.

While benefits to fish through the FWS and NMFS historical management practices have been elusive, the adverse impacts to water users have been immediate, widespread and devastating. In a span of less than 2 years, farmers south of the Delta have seen their CVP water supplies cut from 65 percent of contract to 35 percent on average, an almost 50% percent reduction.

Allocation Reductions
Impacts to South-of-Delta Ag Since 1992

Regulatory Action	Acre-Feet	% Reduction	Contract Allocation %
Historical South Delta CVP Ag contract supply	1,800,000		100%
Water lost to CVPIA, Clean Water Act, and Prior ESA	630,000	35%	
2007 Sub-Total	1,170,000		65%
Water lost to FWS '08 Delta Smelt Opinion	337,500	29%	
2008 Sub-Total	832,500		46%
Water lost to NMFS '09 Salmon Opinion*	202,500	24%	
2009 - What's left?	630,000		35%

* Preliminary analysis; does not include upstream impacts.

In summary, the Westside's ability to supplement its chronically short contract supplies of water with traditional transfers from the north to the south is severely limited and thus the ability to more effectively transfer and/or exchange water between the Westside and

Eastside of the San Joaquin Valley, as well as within divisions, is critical in order to meet immediate water needs.

Without tools that can provide immediate and meaningful relief to the Westside, the future of agriculture throughout the region is in extreme peril. The loss of agriculture throughout the region will disproportionately affect the small, rural communities that are based on this economy.

"Eastside" CVP, (Friant Division)

The Friant Division is located on the east side of the San Joaquin Valley and serves approximately 15,000 farms on nearly 1 million acres of highly productive agricultural lands (See Figure 2). A number of cities and communities, including Fresno, Orange Cove and Lindsay, receive all or a significant portion of their water supply directly from the Friant Division. The Friant Division's water supplies, which historically averaged about 1,250,000 acre feet per year, come from the San Joaquin River via exchange with the historical water rights holders who are to receive a more reliable water supply from northern California CVP facilities. The Friant Division is predominantly permanent crops. Some contractors are wholly dependent upon Friant supplies. Other contractors have supplemental supplies, including groundwater. Friant is a "conjunctive use" services area. In wet years, Friant supplies are used to recharge groundwater aquifers which are relied upon to make water deliveries in dry years.

California water conditions – Impacts to Friant Water Division

Pumping reductions in the Delta as a result of environmental regulations are also affecting the Friant Division. Earlier this year, for the first time in the nearly 60 years of the project, Reclamation was concerned that it could not deliver northern California water to the Exchange Contractors. The Exchange Contractors could then call upon their historical water rights from the San Joaquin River. Up to 200,000 acre feet of Friant water could have been lost. Unfortunately, modeling demonstrates that this risk will continue if conditions in the Delta are unchanged.

Cross Valley CVP water supplies (128,000 acre feet) also come from northern California and those contractors reside within the Friant Division. Delta conditions have severely limited delivery of those water supplies and those diminished deliveries are impacting groundwater supplies for both the Cross Valley contractors and neighboring Friant contractors.

Friant, Reclamation and the NRDC recently settled an 18 year old lawsuit over San Joaquin River operations and its effect on salmon fisheries which was supported by federal legislation, advanced by Senator Feinstein, earlier this year. The Settlement has two goals – restore the river system and salmon fishery and avoid or reduce water supply impacts to CVP contractors. Water released from Friant Dam can be recovered in the Delta. However, recent biological opinions have called into question whether restoration flow releases can be recaptured in the delta and returned to Friant.

The delta pumping restrictions affecting water supplies in the Friant Division could result in the fallowing of over one hundred thousand acres of permanent and annual crops with

significant economic impact to the eastside of the San Joaquin Valley and the loss of specialty crops, such as fruits and nuts, to the entire nation.

The Benefits of Transfers within the Friant Division of the CVP

One of the key features of the Friant Division is the conjunctive use of surface and groundwater. Since the inception of the Project, wet year water has been used to replenish groundwater supplies. In certain instances, ground water recharge has been accomplished by transferring water to non-long term contractors within the Friant Division boundaries who share in a common groundwater basin. That transferred water is then used instead of groundwater ("in-lieu recharge") or put into recharge facilities for direct groundwater recharge. Given the hydrological volatility of water supplies in the Friant Division, wet year conditions may suddenly occur and the opportunity to transfer the wet year water is short as a result of limited storage capability at Friant Dam. Transfer approvals are needed quickly to take advantage of groundwater recharge capabilities in wet years.

Case Study- Friant Division (East Side) Transfer

Since the passage of CVPIA, transfers of wet year water to non-long-term CVP contractors have become increasingly difficult. The proposed legislation contains a provision which would statutorily meet the transfer conditions of the CVPIA that are currently causing restrictions and delays in transferring water.

As an example, in the last wet year cycle, some Friant contractors were able to reduce irrigation demands due to rainfall into late May. One of the Friant districts, who has limited direct groundwater recharge facilities, desired to transfer water to a non-CVP contractor in the Friant Division who could recharge the groundwater using their facilities. The consumptive use condition in the CVPIA had the affect of thwarting this transfer. The water was ultimately put to beneficial use but by means not nearly as efficient and effective. Relief from the current CVPIA provisions for this type of transfer would improve the ability to use wet year conditions to recharge groundwater. Delays as a result of these provisions could result in a loss of water supplies to an already water supply deficient area.

Case Study Eastside to Westside Water Transfer

Many water transfers are extraordinarily complex, requiring numerous agreements, multiple exchange partners and various state and federal agency approvals, long processing times and multiple environmental documents. These processes add risk, time and cost to transfers. In many cases it is simply not possible to complete a transfer during the timeframe water is available. Due to a lack of conveyance facilities and excessive requirements, some seemingly simple transfers can become very complicated. One example:

San Luis Water District (SLWD) is a Westside CVP contractor in Fresno County experiencing a zero water supply allocation in early 2009. Fresno Irrigation District (FID) is an Eastside CVP contractor also in Fresno County. FID owns and operates a water bank. In 2009 FID had surplus banked water to sell. In April terms were struck for a one time transfer of 10,000 acre feet, contingent on successful completion of environmental documents and various approvals.

The transfer required:

- Negotiation and execution of four agreements
- Completion of federal environmental assessment
- Approval by Reclamation
- Approval by State Water Resources Control Board
- Approval by Department of Water Resources
- Approval by State Water Contractors
- Approval by City of Fresno

Despite the most diligent of efforts involving over twenty professionals, it was not until six months later, in the last feasible month, before transfer water actually began its 300 mile journey from FID to SLWD which have facilities separated by less than 25 miles. Throughout the entire process there was no certainty that the essential water would actually be transferred.

Human Impacts of Westside Water Shortages:

In January and February 2008, pumping constraints imposed upon the CVP and SWP by the U.S. District Court for the Eastern District of California intended to protect delta smelt cost the projects collectively approximately 600,000 acre-feet of water. The impacts of regulation would have been worse except that drought took over, resulting in the driest March through May on record. Dr. David Sunding, Professor of Agricultural and Resource Economics at UC Berkeley, estimated the average statewide economic effect of protecting the threatened delta smelt under the constraints imposed by the Eastern District Court would exceed $1 billion and could eclipse $3 billion through lost crops and more expensive water. While the potential statewide impacts of these regulations is staggering, they in fact impact regions differently, and disproportionately affected the San Joaquin Valley's Westside agricultural region due to lack of replacement supply and diminished transfer opportunities.

As a result of the water supply shortages manifested in early 2008, water supply rationing was imposed in June by the CVP upon south-of-Delta contractors and the water supply allocation was cut from 45% to 40%. These actions occurred in the heart of the Westside's growing season and resulted in economic impacts estimated by Dr. David Sunding to exceed $175,000,000 and 700 jobs in a matter of weeks. These impacts were in addition to those that had already rippled through the region as a result of the Eastern District Court constraints.

Lack of transfer water has caused districts and individual growers to increase their reliance upon local groundwater and surface supplies. Forecasted economic impacts indicate potentially significant effects upon the region and State. The most recent analysis conducted by the UC Davis Department of Agricultural and Resource Economics suggests that the economic impact upon Central Valley agriculture due to 2009 water supply reductions resulted in 21,000 lost jobs and reductions in income exceeding $703 million. These findings are dependent upon an assumed ability of farmers to increase groundwater pumping, which is locale dependent and likely to increase production costs substantially.

Land fallowing along the Westside has exceeded 350,000 acre feet and 500 square miles of highly productive land. Unemployment rates through many parts of the Westside exceed Depression era levels. Food lines are common in several rural Westside communities and need has often outstripped the ability of the food banks to provide. Currently, the Central Valley food bank is out of money. They have been serving an estimated 30,000 people through the summer, which is traditionally the best period for agricultural employment. Sadly, demand for social services is peeking at a time when the ability of local and state government to respond is also severely depressed due to the broader global economic downturn.

Residents in the rural community of San Joaquin standing in relief line to receive food imported from China.

The fact is regulatory impacts upon the CVP and SWP are affecting more than just water supplies. Rural communities, big cities, development, and environmental restoration are all being impacted. Currently there is a large, concerted, and long overdue effort to overhaul California's water supply infrastructure and regulatory paradigm. However, many solutions lie too far out in the future and cannot satisfy the critical and urgent need for meaningful improvements now. Reforming the transfer provisions of the Central Valley Project Improvement Act is one important and readily available tool.

Attachment 1:

Letter from Del Puerto Water District to
the Honorable Ken Salazar, Secretary of Interior