The Santa Ana Watershed Project Authority ("SAWPA") has engaged David Taussig and Associates, Inc. ("DTA") to investigate financing alternatives for public facilities and regional planning to be included as part of SAWPA's Integrated Regional Water Management Plan ("IRWMP"), also known as One Water One Watershed ("OWOW") 2.0.

Even with uncertainty in the economy, agencies are unable to wait around for funding. Financing and design efficiencies can and will be improved with regional/inter-agency coordination and transparency.

The primary objective of this chapter is to present feasible and realistic funding alternatives for regional water projects and integrated water infrastructure planning, with an emphasis on new and innovative approaches. A secondary objective of this chapter is to ensure that public financing policies are appropriately addressed, and that the integrated planning required to construct regional water and water quality improvements is adequately funded.

Specific financing objectives are:

- Public facilities and programs developed through the OWOW 2.0 process will be adequately financed and constructed in a timely manner, and the planning and coordination for these types of integrated projects also will be adequately funded.
- The OWOW 2.0 program, through SAWPA or through the actions of its Steering Committee, is able to maximize the availability of public debt financing (and the use of Federal and State grants and loans) for regional infrastructure or programmatic needs, while minimizing the financial burden on the individual agencies and/or property owners.
• Public financing for regional programs or infrastructure is equitable, financially feasible, efficiently utilized and consistent with each agency’s goals and, when necessary, meets all relevant nexus and benefit criteria.
• Public financing mechanisms avoid creating a financial and administrative burden to the public agency, and develop cost savings through increased efficiency in the public arena.
• The certainty and sustainability of identified options for funding regional water projects and integrated planning will be discussed.

SAWPA, as the leading watershed wide water resource agency for the Santa Ana River Watershed (the “Watershed”) and region, plays a major role in administering, participating, coordinating, and facilitating efforts to address regional water management issues. To date, these efforts have been funded primarily by the SAWPA member agencies. SAWPA’s governance structure is a Joint Powers Authority (“JPA”) involving five member agencies: Eastern Municipal Water District (“EMWD”), Inland Empire Utilities Agency (“IEUA”), Orange County Water District (“OCWD”), San Bernardino Valley Municipal Water District (“SBVMWD”) and Western Municipal Water District (“WMWD”). It is particularly noteworthy that SAWPA’s activities benefit multiple stakeholders throughout the Santa Ana River Watershed, many of whom are not SAWPA member agencies and do not share in supporting SAWPA’s annual IRWM expenses budget, which are estimated at between $250,000 and $800,000 – depending on whether an IRWMP update is necessary during the year. These stakeholders include over 97 water related agencies, 3 counties, 59 cities and various State water, environmental and regulatory agencies, federal agencies, other special districts and groups.

California voters approved Propositions 84, 1E, and 1C in 2006. Under Proposition 84, $114 million has been allocated to the watershed subject to an adoption of an Integrated Regional Water Management Plan. Using a decentralized, comprehensive stakeholder involvement process, as well as involving experts from all fields and areas within the watershed, an extraordinarily collaborative and visionary plan was developed. The Santa Ana Watershed Integrated Regional Water Management Plan, called the OWOW Plan, was adopted in November 2010 with a goal of addressing the major water challenges over the next two decades. Highly respected industry-wide as the leading IRWM region in California, SAWPA is expected to receive funding in each round of the Proposition 84 IRWM program. Through the OWOW effort, SAWPA secured $12.0 million in funding for Round I implementation with a DWR-SAWPA contract executed in June 2012. Round II funding for 20 projects in the Santa Ana IRWM Region is projected to be $16 million with contracts among DWR/SAWPA and project proponents expected in the fall of 2013. According to a recent statement by the DWR, Round III IRWM implementation grant applications will not be available until early 2015.
Funding Options for Integrated Regional Planning Efforts
SAWPA and its regional planning efforts are critical for the future of the watershed. Yet SAWPA’s bottom-up, broad-based approach requires that SAWPA expend valuable resources for coordination, support, and facilitation. To date, SAWPA’s efforts have been largely funded by the SAWPA member agencies and grant funded administration funds. With California’s uncertain future economic climate, grant funding through water bonds is no longer a secure funding source. In addition, SAWPA’s member agencies tightened their financial belts during the Great Recession which threatens SAWPA’s largest funding source. Finally, many parties benefit from SAWPA’s leadership and value creation, but do not contribute to SAWPA’s OWOW Plan development and Plan update expenses.

It is imperative that SAWPA review its funding options and develop plans today to ensure a long-term stable funding source for the future. In June 2012, SAWPA completed a detailed evaluation of its funding challenges and summarized its findings in a document titled, “2012 OWOW Funding Options” (“Study”). DTA found the Study to be comprehensive, creative, and reasonable in its recommendations and conclusions.

SAWPA is not the only agency struggling to find a way to fund the coordination and facilitation of regional planning efforts. As part of this Report, we have investigated funding sources used by other IRWM regions. While the California Department of Water Resources (“DWR”) and others encourage an integrated approach to infrastructure planning, until a long term stable funding source is identified, it will be difficult to fully achieve the desired benefits.

SAWPA Study of Funding Alternatives
The Study identifies seven funding mechanisms that may be used to fund all or a portion of SAWPA’s ongoing operating expenses. Each of these mechanisms is discussed briefly below. While individually, these mechanisms may not be an ideal source of stable, long term funding, taken in combination, one or more of these mechanisms could provide a revenue stream to offset or reduce the current contributions from SAWPA members.

- Grant Funding
- Voluntary Contributions
- Project Application Fee
- Fee on Projects Funded
- Fee on Projects Funded
- Public Private Funding Partnerships
- Form an IRWP Planning Committee
- Continue Status Quo

Grant Funding
SAWPA has been successful in receiving planning grants in the past and will continue to pursue all grant funds that are available in the future. However, planning grant funds may not always be available and should be thought of as supplemental funding, rather than a permanent source of funding.

Grant funding typically is tied to State bond funds, which are uncertain at best. While there is an
expectation that a water bond will appear on the November 2014 ballot, past attempts to put the measure on the ballot did not succeed; and even if on the ballot, approval by the voters is not guaranteed.

**Voluntary Contributions**

Voluntary contributions of money and staff time are appreciated by SAWPA. However, SAWPA member agencies have contributed a disproportionately large share of SAWPA’s funding requirements. In addition, by their nature, this type of funding is voluntary, and therefore is not a reliable source of long term funding. Voluntary contributions are a significant component of the funding for this conference.

A segregated fund administered within the SAWPA Planning Department, known as the One Water One Watershed Fund (“OWOW Fund”), was created to provide a means for other agencies or groups to participate financially in the development of the OWOW process and to help offset costs borne by SAWPA and its member agencies. The OWOW Fund collects and manages funds provided to SAWPA for development and implementation of the OWOW program.

The following is SAWPA’s official policy for the administration of the OWOW Fund:

“Upon receipt of funds from agencies or other groups provided for the purpose of supporting the One Water One Watershed Program, SAWPA shall deposit such funds into a segregated account (Fund No. 392 - OWOW). This account will accrue interest. The segregated account will be included in the SAWPA budget during the annual budget cycle. SAWPA administrative and project costs will be deducted from the account.

All project-related expenditures from this account shall be reviewed by the SAWPA Commission to ensure consistency with the purpose of the One Water One Watershed Program and regional integrated watershed planning. Activities undertaken under this fund include:

- Collection, collation and analysis of data for One Water One Watershed plans
- Development of written materials, including maps and diagrams, to support the One Water One Watershed Program
- Development and implementation of stakeholder outreach and education activities in support of One Water One Watershed planning
- Provision of technical assistance and facilitation in the development of specific sub-regional plans in support of broader One Water One Watershed objectives

Participation and funding of activities undertaken as part of this fund does not imply an endorsement of specific projects developed under the One Water One Watershed Program.”
Application Fee for Project Grant Submittals
A new funding option would be for SAWPA to charge an application fee for each project an agency submits for funding. For the first round of Proposition 84 funding, 297 project applications were submitted to SAWPA for inclusion in the OWOW plan and for consideration of possible funding. By charging a modest application fee of $500 or $1,000 per project, SAWPA could have generated $148,500 to $297,000. However, it is unknown if the number of projects submitted would have been reduced as a result of such a fee.

In addition, charging a fee for each project generates a one-time funding source that is linked to future grant funding, rather than an ongoing permanent source.

Fee for Project Successful In Obtaining Grant
A slightly different funding option would be to charge an administrative fee on each project selected to receive grant funding. By charging the successful project applicants, those who benefit most from the IRWMP process would help pay a portion of SAWPA’s ongoing costs.

For Round I of Proposition 84, 13 projects in the watershed received $12.7 million in grant funding. If SAWPA charged a 10% fee for each project, this would have generated $1.3 million for planning and facilitation.

As mentioned above, charging a fee for successful projects generates a one-time funding source that is linked to future grant funding, rather than an ongoing permanent source. SAWPA’s legal counsel is reviewing the legality of charging such a fee.

Public Private Partnerships
Many businesses and business coalitions benefit from the work done by SAWPA to develop and implement OWOW and OWOW 2.0. A new funding option would be for SAWPA to identify these businesses and try to form beneficial relationships such that the businesses would be willing to contribute funds in support of the OWOW effort. Like voluntary contributions, this type of funding is optional, and therefore is not a stable source of long term funding.

IRWMP Planning Committee Memberships
Development of an IRWMP Planning Committee could create a permanent source of funding for SAWPA’s ongoing efforts. If such a task force included all stakeholders within the watershed and required a minimal annual contribution from each, this would result in a permanent funding source for the OWOW program at a minimal cost to each stakeholder (currently estimated at less than $5,000 per agency annually).

To get agencies to agree to be part of the task force and make contributions annually, there needs to be a compelling and beneficial reason for them to join. Task force membership would need to offer agencies more benefit than just receiving grant funding. Demonstrating the direct benefit of regional planning to each agency and organization sufficiently to assure regular and ongoing budgeted funding in the task force would be the most difficult hurdle to implementation. SAWPA has used the task force model to successfully fund projects in the past.
Status Quo
Another option to secure funding for SAWPA’s ongoing planning and collaboration efforts is to continue the current model of relying upon contributions from the SAWPA member agencies.

In many ways, funding from the five SAWPA member agencies reflects a broad based multi-agency approach for funding regional integrated planning. With most of the SAWPA member agencies serving as a wholesale water agency or water supplier role for a large area in the watershed, their sub-agencies provide funding to the SAWPA member agencies through water connection fees and rates. Funding received by water fees and rates by each of the SAWPA member agencies from sub-agencies and the general public is funneled in part to support SAWPA in its ongoing regional planning efforts.

SAWPA Funding Versus Other Funding Approaches
Survey of Leading IRWM Regions
As a part of this Report, DTA has investigated the funding approached used by other IWRM regions. In the course of DTA’s research, DTA interviewed DWR staff regarding the myriad of methodologies that IRWM regions are using to fund their respective ongoing operational expenses. DWR staff provided DTA with a list of several the most highly respected and innovative IRWM regions and suggested that DTA contact them and catalogue their approaches to funding. The following are DTA’s observations after conducting interviews with staff at the following agencies.

The survey participants (in no particular order) were:

- Sacramento River Sub Region Funding Area – IRWM Region No. 1, American River Basin; Regional Water Authority staff
- North Coast Sub Region Funding Area – IRWM Region No. 21, North Coast; Humboldt County Planning Department
- San Diego Sub Region Funding Area – IRWM Region No. 26, San Diego; San Diego County Water Authority
- Tulare/Kern Sub Region Funding Area – IRWM Region No. 38, Upper Kings Basin Integrated Regional Water Management Authority; Kings River Conservation District

DTA’s interviews with the IRWMs revealed that all of the funding methodologies in use by the survey participants were either already implemented by SAWPA or are under consideration in SAWPA’s “2012 OWOW Funding Options” Study. The most notable area of possible improvement for SAWPA is that other IRWMs have been able to develop higher percentages and a broader array of stakeholders contributing funds to support their respective operations.

The Kings Basin IRWM Authority in the Tulare/Kern Funding is funded primarily through a broad coalition of regional agricultural, municipal and community interests with a membership of 50+- members each paying $7,000 in annual fees plus a one-time $30,000 fee to fund the original IRWMP. Further, grant applicants must be “sponsored” by a member in good standing to qualify for grant consideration.
The San Diego IRWM is funded through fiscal year 2016 with a MOU documenting combined support from San Diego County, the City of San Diego and the San Diego Water Authority to fund IRWM operations up to a total of $1,470,000; San Diego’s funding sources are more vertically diverse and are a closer reflection the type of organizations (i.e. governmental, public utility, private water purveyors) submitting projects for grant funding. The San Diego IRWM region is studying the use of an application fee for grant submittals to fund its operations.

Similar to SAWPA, the American Basin IRWM governance structure is a Joint Powers Agreement (“JPA”). The American Basin IRWM is funded by a consortium of similar type organizations, water purveyors plus wastewater organizations; there are a total of 25 water and wastewater agencies operating within the IRWM boundaries. 18 of the 25 share the IRWM’s ongoing administration expenses. In this case the funding source is horizontal; however, the cost sharing has greater breadth.

**Voluntary Subscriber Fees**

In addition to reviewing the Study and surveying other IRWM regions, SAWPA recommended that DTA investigate voluntary subscriber fees, similar to those proposed by the Murrieta Fire Department.

**Murrieta Fire Department Case Study**

With funding decreasing over the past few years the Murrieta Fire Department (“MFD”) searched for ways to maintain its current level of service without raising taxes. To help offset the costs of providing Emergency Medical Service (“EMS”), the MFD has proposed a program that would help compensate for the cost of emergency calls. The Murrieta EMS Subscription Program would be an annual, voluntary membership fee designed to shield Murrieta residents and businesses from out-of-pocket expenses related to EMS.

MFD’s proposed cost recovery program will charge $350 per response, per person for each medical aid response that is performed. As an alternative to paying this charge, the MDF EMS Subscription Program (“Subscription Program”) allows residents and business owners the option of paying a small annual fee rather than being charged the response fee. For single-family homes, the cost is $48 per year. For businesses the cost of this membership depends on the size of the business measured by the number of employees. The Subscription Program membership covers all response fees for services rendered.

Similar to MFD’s model, SAWPA could use a combination of committee membership with grant application fees where committee members pay lower grant application fees than non-members.

**Conclusions**

In one form or another, all of the funding mechanisms described above are available to SAWPA. Further study and vetting by SAWPA leadership and legal counsel are required for implementation. With California’s uncertain future economic climate, grant funding through water bonds is unreliable at best. At the same time, due to the Great Recession, SAWPA member agencies have had to tighten their financial belts fueling funding uncertainty. In addition, concerns about equity require that SAWPA investigate methods to spread its costs over a broader group of stakeholders.
Facility Funding Options
The One Water One Watershed Plan 2.0 contains a wide variety of public improvements to be constructed by multiple public agencies, including water supply and water quality projects, as well as projects that address the habitat restoration, flood control, recreational, and open space needs of the watershed. This section summarizes financing methods which may provide funding beyond Proposition 84 Chapter 2 grant funding.

State and Federal Funding
In the past, SAWPA, its member agencies, and other local agencies in the watershed have been successful in obtaining State and Federal funding to build projects. However, the primary emphasis of this Report is on local funding sources.

While State and Federal grants and loans can be useful in funding one-time projects or coping with shortfalls, the consistent availability of such funding cannot be ensured and is often beyond the control of local public agencies. In addition, such grant programs typically require local matching funds, while loan programs require a local revenue source for repayment. DTA strongly recommends that public agencies continue to search and apply for available grants and loans; to the extent that projects are able to receive such funding, the need to undertake the local mechanisms cited below is diminished. However, local sources of revenue are recommended because they are under the control of each agency and are more predictable for long-term planning purposes.

State Funding
2014 Bond Measure
A California Water Bond is currently slated for the November 4, 2014 ballot, as a legislatively-referred bond act. The measure is known by its supporters as the Safe, Clean, and Reliable Drinking Water Supply Act and in its current configuration would authorize the State to borrow $11.1 billion to overhaul the state's water system.

A water bond measure was originally certified to be on the State’s 2010 ballot. It was removed and placed on the 2012 ballot. The California State Legislature, on July 5, 2012 approved a bill to take the measure off the 2012 ballot and put it on the 2014 ballot, purportedly to increase the likelihood of the approval of the Jerry Brown Tax Hike Initiative in 2012. Although there will be plenty of hot-button issues on the 2014 ballot in California, some observers predict that "the biggest fight, the sharpest split, may come over water. Specific spending proposals currently under consideration include:

- $455 million for drought relief projects, disadvantaged communities, small community wastewater treatment improvements and safe drinking water revolving fund
- $1.4 billion for "integrated regional water management projects"
- $2.25 billion for projects that "support delta sustainability options"
- $3 billion for water storage projects
- $1.7 billion for ecosystem and watershed protection and restoration projects in 21 watersheds
- $1 billion for groundwater protection and cleanup
- $1.25 billion for "water recycling and advanced treatment technology projects"
Prior Bond Measures
Recent successful State Bond measures that funded water quality and water supply improvements include Proposition 13, Proposition 50 and Proposition 84.

Proposition 13
In March 2000, California voters approved Proposition 13 (2000 Water Bond), which authorized the State of California to sell $1.97 billion in general obligation bonds to support safe drinking, water quality, flood protection and water reliability projects throughout the state. SAWPA successfully implemented Proposition 13 funding to construct $1 billion in infrastructure projects.

Proposition 50
Passed by voters in 2002, Proposition 50 authorized $3,440,000,000 general obligation bonds to fund a variety of water projects, including:

- Specified CALFED Bay-Delta Program projects including urban and agricultural water use efficiency projects;
- Grants and loans to reduce Colorado River water use;
- Purchasing, protecting and restoring coastal wetlands near urban areas;
- Competitive grants for water management and quality improvement projects;
- Development of river parkways;
- Improved security for state, local and regional water systems; and
- Grants for desalination and drinking water disinfection.

Proposition 84
Passed by voters in 2006, The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84) authorized $5.388 billion in general obligation bonds to fund safe drinking water, water quality and supply, flood control, waterway and natural resource protection, water pollution and contamination control, State and local park improvements, public access to natural resources, and water conservation efforts.

State Revolving Funds
The State of California has established two State Revolving Funds (“SRF”) which allow local agencies to have access to low interest loans to finance projects. The Clean Water SRF is a loan program that provides low-cost financing to eligible entities within State and tribal lands for water quality projects including: all types of nonpoint source, watershed protection or restoration, estuary management projects, and more traditional municipal wastewater treatment projects. The Drinking Water SRF is a loan program that provides low-cost financing to eligible entities within the State and tribal lands for public and private water systems infrastructure projects needed to achieve or to maintain compliance with safe drinking water requirements and to protect public health. Small water systems and disadvantaged communities are given higher funding priority. Both SRFs are managed by the State and funded by the federal Environmental Protection Agency.
Other State Funding
Shown below is a list of other State funding programs:

- California Department of Fish and Game Pacific Coast Salmon Restoration Fund (Fisheries Restoration Grant Program)
- California Coastal Conservancy Proposition 84 Funds
- California Coastal Conservancy Southern California Wetlands Recovery Project Community Wetland Restoration Grants
- California Wildlife Conservation Board
- California State and Regional Water Quality Control Board Clean Water Grant Program
- California Integrated Watershed Management Grant Program Proposition 50 Funds
- California Department of Parks and Recreation Habitat Conservation Fund
- CalTrans Environmental Enhancement and Mitigation Program
- U.C. California/NOAA California Sea Grant College Program

Federal Funding
2013 Water Resources Development Act
On March 20, 2013 the Senate Environment and Public Works (EPW) Committee unanimously approved S.601, the Water Resources Development Act of 2013. The bill provides critical flood protection for communities across the country, maintains the flow of commerce, and will create up to 500,000 new jobs. The bill seeks to further leverage government funds for water infrastructure projects through an innovative financing pilot project program—referred to as the Water Infrastructure Finance and Innovation Act (WIFIA)—which can help our nation meet its infrastructure improvement needs. The WIFIA, based on a popular program in the transportation sector, takes the dollars appropriated to it, leverages them in the market and takes that total available assistance and loans it from the federal government directly to a project.

Title X of WRDA has $250 million authorized for the WIFIA program ($50 million per year for five years 2014-2018) with eligibility for both water resources projects (flood control, levees, dams, etc.) and water/wastewater infrastructure. Projects that are eligible for SRF funding are eligible for funding from this WIFIA, as are energy efficiency upgrades, desalination, and acquisition of real property. Projects carried out by a non-public entity are eligible, provided that they have a public sponsor. There is a $20 million minimum for eligibility, and repayment of the loan must be from a dedicated revenue source.

Other Federal Options
Shown below is a list of other federal funding programs and options:

- NOAA/NMFS Restoration Center Community-Based Restoration Program
- NOAA/NMFS Restoration Center Open Rivers Initiative
- NOAA/NMFS Proactive Species of Concern Grant Program
- NOAA National Sea Grant College Program
- NOAA Coastal and Estuarine Land Conservation Program
- NOAA/ACOE/USFWS/EPA/NRCS Estuary Habitat Restoration Program
- EPA Wetlands Protection Grants and Near Coastal Waters Programs
In 2012, the Congressional Research Service prepared a report entitled “Legislative Options for Financing Water Infrastructure” that describes several water infrastructure financing alternatives under consideration at the Federal level. The following six key actions are under consideration, some of which may benefit SAWPA and other local agencies.

- Increase funding for State Revolving Fund Programs
- Create a Federal infrastructure trust fund
- Create a Water Infrastructure Finance Innovation Act (WIFIA)
- Create a National Infrastructure Bank
- Modify Private Activity Bond Restrictions
- Reinstate Build America Bonds

**Increase Funding for State Revolving Fund Programs**

Typical State Revolving Fund ("SRF") programs are funded by an initial (and periodic) capital injection(s) by the Federal government and managed by individual states. Annual capital appropriations by the Federal government fund the SRFs. The SRF essentially functions as a bank, lending at low interest rates for specific water projects. Loan repayments are then recycled back to individual SRF programs. SRF programs are governed by eligible project rules in addition to funding management constraints. States only make loans, purchase local debt, or issue financial guarantees and are not allowed to deplete the capital of the fund. Thus, the fund operates as a “revolving” source of financing.

According to the Congressional Research Service, Congress is considering expanding the funding for SRF programs.

**Federal Infrastructure Trust Fund**

Federal trust funds currently exist to provide financing for airport and highway infrastructure but do not exist for water infrastructure. In contrast to an SRF, a Federal trust fund is supported by a fixed annual revenue stream (for example Federal fuel taxes). The revenues are then collected by the Federal Government and are dedicated or "earmarked" for expenditure on specific purposes.

Public focus on the Federal deficit decreases the likelihood that a water trust fund could be established. However, some members of Congress propose to increase infrastructure spending with a water trust fund.

**Water Infrastructure Finance Innovation Act ("WIFIA")**
In 1998, Congress created the Transportation Infrastructure Finance Innovation Act ("TIFIA"). TIFIA provides Federal credit assistance of up to one-third of project costs, with a minimum project cost-eligibility requirement of $50 million. Eligible projects must have a dedicated revenue stream (typically tolls). TIFIA is supported by $122 million in Federal money annually, administered by the Department of Transportation.

A WIFIA program would be similar to the TIFIA and potentially administered by the Environmental Protection Agency. The Water Resources and Environment Subcommittee has circulated a draft WIFIA bill (H.R. 3145) and held two hearings on the topic in 2012. One of the main benefits of the proposed program would be to provide low-cost capital to infrastructure projects. Under the TIFIA program, loan repayment does not begin until 5 years after “substantial completion” of the project, with payments ending after 35 years. This structure allows projects to be built and benefits to be realized before loan repayment starts, a significant benefit to water management projects. However, a drawback is that the program requires a revenue stream. For water infrastructure projects, this would limit eligible projects to those that collect user fees based on water use.

WIFIA is a part of the Water Resources Development Act. In a rare display of bipartisanship on major legislation, the U.S. Senate passed Sen. Barbara Boxer’s water resources bill on Wednesday, May 15, 2013. The $12.5 billion bill, which includes a long-sought authorization for levee improvements in Sacramento, drew overwhelming support from both Democrats and Republicans. The Water Resources Development Act would authorize a variety of U.S. Army Corps of Engineers projects across the country, including flood control efforts, port improvements, wetlands restoration and coastal storm protection. The bill includes language that would expedite the environmental review process that many critics say leads to unnecessary delays and added costs in such projects. The bill next moves to the House of Representatives for their consideration.

National Infrastructure Bank
In general, an infrastructure bank is an entity that manages capital and provides loans for infrastructure development. Both current Federal and State administrations ran on a political platform that includes increased infrastructure funding, and an infrastructure bank has been considered by Congress on several occasions. An infrastructure bank could provide funding for a range of infrastructure projects, with water projects as just a single component.

Modify Private Activity Bond Restrictions
Private Activity Bonds are tax-exempt bonds that are available for privately owned water facilities that are either operated by a government unit or charge water rates that are approved by a political subdivision of a community. Most private activity bonds, including those for water furnishing and water treatment facilities are subject to a state volume limit. Congress is considering changing requirements to allow more access to tax-exempt bonds for water infrastructure.

Reinstate Build America Bonds
As part of the American Recovery and Reinvestment Act, Congress created Build America Bonds to encourage job creation through infrastructure projects. These bonds could be issued for any
governmental purpose for which tax-exempt governmental bonds (excluding private activity bonds) can be issued, including capital expenditures and working capital. The authority to issue Build America Bonds expired in December 2010. Congress is considering reinstating Build America Bonds to target water infrastructure projects.

**Private National, Regional and Local Funding**

In addition to Federal and State funding sources, there are also numerous private national, regional and local funding sources for southern California habitat restoration projects, such as National Fish and Wildlife Foundation.

**Proposition 218**

One of the key funding considerations of this Report is Proposition 218 which was approved by the voters in California in 1996. This constitutional amendment, which is also called the “Right to Vote on Taxes Act,” is arguably the most significant impediment to arise against adequate local infrastructure funding since the adoption of Proposition 13 in 1978. Proposition 218 was a successful effort by the State’s voters to ensure that local governments could not levy any taxes, assessments or user fees on property owners without the express consent of the voters in the community where such charges would be levied. Specifically, all general taxes need to be approved by at least one-half of the electorate, all special taxes need to be approved by at least two-thirds of the electorate, and all special assessments and property-related fees must be approved by at least one-half of the impacted property owners submitting mailed ballots prior to the public hearing at which such special assessments or fees are to be approved by a local legislative body (or, at the option of the legislative body, by at least two-thirds of the registered voters). Any fee that is property-related, or that arises as a consequence of property ownership, falls under the scrutiny of Proposition 218. Furthermore, the initiative power of the electorate was confirmed by Proposition 218 to ensure that local taxes, assessments, and fees can be reduced at any time by the electorate, with the only exception being when such revenues are required to satisfy an existing contractual obligation (e.g., the payment of debt service on outstanding bond issuances). The only exceptions to these voter requirements are fees for sewer, water, and refuse collection. However, based on the California Supreme Court’s decision in *Bighorn-Desert View Water Agency v. Verjil* these types of fees are subject to Proposition 218 noticing and hearing requirements.

Although the distinction between fees, taxes and assessments may sometimes seem blurred and overlapping, the following discussion provides the general definition of the various local governments “charges”. A fee is a charge imposed to recover the costs of a government service or to mitigate the impacts of the fee payer’s activity on the community. User fees recover the costs of service and include, for example, utility rates (enterprise fees) and facility usage (park fees). Regulatory fees are related not only to mitigation (development impact fees, capacity fees), but also to the recovery of costs to regulate fee payer activities (plan check fees, building permit fees).

A tax is a charge imposed by government to pay for general governmental purposes (“general tax”) or specific governmental purposes (“special tax”). Assessments are charges related to special benefits that a property or business derives from the improvements or services paid for by these charges.
The significance of Proposition 218 to the funding of the local infrastructure cannot be overstated. Most sources of local funding, with the exception of sewer, water, and refuse collection fees, are now effectively off-limits without an election. The ability for general funds to pay for public infrastructure is also limited due to competition for such funds from other uses, and the requirement that any additional bond funds must be approved by two-thirds of the electorate. Unless the electorate or the property owners in an area vote in favor of a general tax, special tax, assessment or fee, none of these funding sources can be implemented.

**Salinas Decision**

The far-reaching impacts of Proposition 218 are probably most clearly evidenced by the case of the *Howard Jarvis Taxpayers Association v. City of Salinas*. In that case, the City of Salinas went to great efforts to design a stormwater management utility fee that it thought was not property related, in order to avoid the necessity of holding an election. The proposed fee was not put to a vote of the property owners or the registered voters, but instead was enacted by the City Council through the adoption of two ordinances. The first ordinance imposed a Stormwater Management Utility Fee within the City, while the second established fee levels. Fee levels were assigned to assessor’s parcels according to the land use types located on each parcel, with the fees themselves based on the relative amounts of impervious area typically associated with each land use type. To avoid being considered a property-related fee, the City exempted undeveloped parcels and those developed parcels that were not expected to access the City’s storm management system. The Howard Jarvis Taxpayers Association challenged the fee, and the trial court ruled in favor of the City because it concluded that (a) the fee was not property-related, and (b) the fee was exempt from the voter requirement as a result of the sewer and water fee exemptions under Proposition 218.

The Howard Jarvis Taxpayers Association appealed to the Sixth Appellate District of the State Court of Appeals, which overturned the trial court’s finding by a 3-0 vote. The basis for the Appeal Court’s decision was an emphasis on Proposition 218’s fundamental premise that “the provisions of this act shall be liberally construed to effectuate its purposes of limiting local government revenue and enhancing taxpayer consent.” As a result, the Appeals Court determined that a fee based on land use was not a charge directly based on use (such as the metered use of water for a water fee), and that it was in fact a fee based on ownership of property because a property owner could not escape the fee by declining to accept the service. The Appeals Court went on to declare that stormwater management activities are separate from sewer and water services, and therefore would not be eligible for the voter exemption permitted under Proposition 218 for sewer and water fees. The State Supreme Court denied the City’s petition to review the Appeals Court’s decision.
Santa Clara County Decision

On July 14, 2008, the State Supreme Court, in the case of Silicon Valley Taxpayers Association v. Santa Clara County Open Space Authority, decided two key points relating to Proposition 218. First, the State Supreme Court held that legal challenges to special assessments are subject to independent judicial review, reversing a number of pre-Proposition 218 cases which gave more deference to the public agency that established the assessment district. Second the State Supreme Court held that the assessments in the Santa Clara case did not meet the substantive requirements of Proposition 218 because the Santa Clara County Open Space Authority did not demonstrate the special benefit to the assessed property and the amounts assessed were not proportional to the benefit received by each parcel.

In 2001, the Santa Clara County Open Space Authority conducted proceedings to establish a countywide assessment district to acquire, improve and maintain regional open space. As a part of the proceedings, an Engineer’s Report was prepared and a ballot protest procedure was conducted. The Engineer’s Report claimed that all property within the district received special benefit from the proposed land acquisitions and set the assessment at $20 per single family parcel (and provided a formula to determine the rates for other types of property). However, the land proposed to be acquired was not identified. Following a mailed ballot procedure, the assessment passed by more than 50% of the ballots returned (weighted by level of assessment). The assessments were later challenged on the basis that the Santa Clara County Open Space Authority failed to satisfy the special benefit and proportionality requirements of Proposition 218.

Although this case involves an open space assessment and many of the court’s comments are related to assessments rather than fees, this case needs to be carefully reviewed and considered for its implications for any proposed assessment or property related fee. In its decision, the State Supreme Court stated that Proposition 218 requires courts to make an independent review of local agency decisions regarding assessments and property-related fees and charges. In addition, while property-related fees do not have the same special benefit restrictions (see Section III.C.3 for further discussion) that apply to assessments, Proposition 218 states that a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to that parcel. The State Supreme Court found that the Santa Clara County Open Space Authority failed to meet the proportionality tests because the Engineer’s Report did not (1) identify the improvements to be funded, (2) estimate the cost of such improvements, and (3) connect the proportionate costs of the benefits received from the public improvements to the assessed parcels.

Subsequent to the Santa Clara County decision, there have been additional court cases that continue to scrutinize assessments as they pertain to the requirements of Proposition 218.
**Summary of Proposition 218 Nexus Requirements**

Under Proposition 218 a fee or a charge shall not be imposed unless it meets all of the following requirements:

- Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service;
- Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed;
- The amount of fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to that parcel;
- No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted; and
- No fee or charge may be imposed for general governmental services including, but not limited to police, fire, ambulance or library services where the service is available to the public at large in substantially the same manner as it is to property owners.

**Local Revenue Sources**

This section contains brief summaries of a number of mechanisms that may provide funding for local agencies. The findings in these sections are based on a review of relevant literature and DTA infrastructure public financing experience.

This section is focused on possible local revenue sources. Federal and State funding are discussed in earlier sections and can be very useful in funding one-time projects or coping with shortfalls, but consistent availability of such funding cannot be assured and is often beyond the control of local public agencies. In addition, Federal and State programs often involve loans that require some type of collateral and a local stream of revenue to repay them. Local agencies should search and apply for any available grants and loans; to the extent that projects are able to receive such funding, the need to undertake the local mechanisms cited below is diminished. This section summarizes financing mechanisms that may be utilized by local agencies in place of general fund revenues. Table 8-1 and Table 8-2 located at the end of this Chapter summarize financing alternatives that should be considered, as well as brief descriptions their advantages and disadvantages.

**Longevity and Certainty of Funding**

In an effort to clarify the California Department of Water Resources requirement for an explanation of the certainty and longevity of known or potential funding for an IRWM plan and projects that implement the plan, DTA contacted Ms. Tracie Billington, the Branch Chief for DWR’s IRWM Grants and Funding. Ms. Billington explained DWR’s perspective in great detail. While a matrix showing the specific funding sources and their certainty and longevity is appropriate for individual projects when such information is available, a more qualitative approach is acceptable when identifying potential funding mechanisms.

As explained by Ms. Billington, an analysis of the “Certainty” and “Longevity” of known or potential funding sources is most appropriately addressed when looking at specific infrastructure projects.
example, the IRWM projects that were submitted to SAWPA as part of the OWOW 2.0 process have been ranked, and in general the higher ranking projects having a greater “Certainty” or probability of being financed than the lower ranked submittals.

In addition, those financing mechanisms which have been approved and are included in current Federal, State, or local budgets have a greater level of certainty than those which require future voter or legislative approvals.

The “Longevity” of a funding source is customarily stated in the law creating or approving the mechanism. For example, many bonds are issued for 30 year terms, while certain tax measures may sunset after 5 or 10 years. In addition, pay as you go programs may not generate sufficient revenues up front, and may require interim revenue sources to build facilities in a timely manner. Therefore, it is important to match the time constraints of various funding programs to specific projects to ensure project completion.

In addition to funding for new infrastructure projects, local agencies are also concerned funding the ongoing operations and maintenance of such facilities. Therefore as a part of the discussion of local funding options in the sections below, we have indicated where such funds can also be used to pay for ongoing operations and maintenance.

The local financing methodologies described below have been grouped into (1) traditional, customarily used approaches, and (2) new, creative and innovative financing structures.

**Traditional Public Finance Measures**

**Sales Tax Measure**

A sales tax is a funding option that places a consumption tax on certain goods and services. Most sales taxes are collected by the seller, who pays the tax to the public entity that is charging the tax. Under state law, a local agency may only increase the sales tax within its jurisdiction in increments of 0.125%. According to Section 7251.1 of California Transactions and Use Tax Law, the combined rate of all sales taxes imposed shall not exceed 200 basis points above the base tax rate for the State (as of January 1, 2013, the rate shall not exceed 9.5% based on a base rate of 7.5%).

Sales tax revenues may be used to fund any facilities or services specified in the ballot materials. Therefore, this type of funding could be used to fund a broad array of capital, O&M and planning costs. The legislative body of a local government or district must place the sales tax increase on a special, primary, or general election ballot. As a special purpose tax, it would require a 2/3 majority vote.

Statewide, only 35 out of 68 special purpose tax measures (those requiring a 2/3 vote) were approved by the relevant electorate in the November 2012 election. School parcel taxes had the highest passing rate of 64%, County special taxes had a passing rate of 58%, and Special Districts had a passing rate of 44%. City special taxes had a passing rate of only 33%. To be successful, a local would need to undertake an effective public outreach effort to demonstrate to voters the benefits to that will be achieved through this additional tax.
As a result of California Proposition 30, the State’s base sales tax rate was increased by 0.25% (from 7.25% to 7.5%) on January 1, 2013. The 0.25% tax rate increase will expire on December 31, 2016. Local agencies will find it extremely difficult to pass an additional sales tax increase to fund regional water projects until after the State 0.25% tax increase expires.

**Stormwater Utility Fee**

A municipal stormwater utility fee (“Stormwater Utility Fee”) can be adopted under Health and Safety Code Section 5471 (“Section 5471”). Section 5471 allows certain public agencies to collect fees or charges from property owners (including standby charges from owners of undeveloped properties) to pay for capital improvements, operations, and maintenance for their storm drainage, water and sewerage systems. The public agencies authorized to levy these charges include counties, cities, sanitary districts, sewer maintenance districts, and other districts authorized to acquire, construct, maintain and operate sanitary sewers and sewerage systems.

Revenues derived from the fees levied under Section 5471 can be used for the acquisition, construction, reconstruction, maintenance, and operation of storm drainage, water and sewerage systems, as well as the repayment of principal and interest on bonds issued for the construction or reconstruction of these storm drainage, water and sewerage systems.

As a parcel-related fee, a Stormwater Utility Fee must be calculated according to Proposition 218 guidelines for fees set forth in Section III.C.3.

**Los Angeles County Case Study**

The County of Los Angeles has been considering how best to implement a dedicated funding mechanism for surface water quality since at least 2005. Waterways throughout the county have been found to be polluted above acceptable levels under the federal Clean Water Act and other state and federal laws. The Los Angeles County Flood Control District has recently proposed to adopt a Clean Water, Clean Beaches Measure, which would establish an annual fee to pay for clean water programs. The proposed clean water fee would be imposed on property within the Los Angeles County Flood Control District, which includes most of Los Angeles County (with the exception of portions of the Antelope Valley), for the purpose of improving water quality and reducing pollution from stormwater and urban runoff.

The proposed clean water fee would provide dedicated funding for local and regional projects and programs to help keep pollution out of stormwater and runoff, clean up pollution that flows into waterways, and use stormwater and runoff to recharge groundwater supplies. The proposed fee for each parcel is based on impervious area, which is determined based on land use, zoning, and lot size.

On January 15, 2013, the Board of Supervisors opened a public hearing to listen to public testimony regarding the proposed measure. Due to significant community and agency concerns at the hearing, the Board of Supervisors kept the protest period open for an additional 60 days. On March 12, 2013 the Board again listened to public testimony. At the conclusion of public testimony the Board of Supervisors voted to not proceed with the Clean Water, Clean Beaches Measure at this time and then directed Public Works to continue working towards consensus with stakeholders on key elements of the proposed measure and to report back on progress in 90 days. If consensus is reached among the
stakeholders, the Board of Supervisors may consider placing the proposed fee on the general ballot in June or November of 2014.

**Water, Sewer, Trash Fees**
While Proposition 218 does not require voter approval for sewer, water and refuse collection user fees, it does require a clear nexus between costs and benefits, as well as a clear separation between existing development and future development. Therefore, to implement fees of this nature, a nexus must be demonstrated between the public facilities and services being funded and the demand of a household or business for water, sewer and refuse collection services. Since most local utilities already charge these types of fees to pay for their costs of service, rates would need to be increased to cover the cost of additional public facilities.

The exemptions for water, sewer and refuse collection user fees from the restrictions of Proposition 218 apply only to the voter approval requirements. As parcel-related fees, these user fees must still be calculated according to Proposition 218 guidelines for fees (discussed in Section C above). Written notice must still be provided to property owners of record. Also, the proposed fees are subject to a public hearing prior to receiving legislative approval. The submittal of written protests prior to the public hearing by a majority of the property owners impacted by a user fee is sufficient to prevent the imposition of that fee. However, it is DTA’s experience that on a large-scale financing program (e.g., an entire city or water district); the protest provision has little impact because it is so difficult to contact at least 50% of a large area’s property owners and persuade them to mail in their protest ballots. The only exception to this rule is when a few landowners own 50% of the acreage.

**Public Enterprise Revenue Bonds**
Public enterprise revenue bonds are debt instruments payable from a special fund - a limited source pledge which secures debt service payments of the bonds. As such, these bonds usually finance facilities related to revenue generating enterprise and are payable from the revenues of that enterprise. There are a number of State statutes authorizing the issuance of revenue bonds. The most commonly used statute is the Revenue Bond Law of 1941.

The Revenue Bond Law of 1941 allows cities, counties, and certain special districts to issue revenue bonds to finance, among other things, water and sewer collection, supply, and treatment facilities. The law requires a majority vote to authorize the size and purpose of the bond issue. Because these bonds are secured by a pledge of revenues and not an agency's general fund, they typically carry a higher interest rate than general obligation bonds, but a lower rate than the land-secured bonds (CFD or AD). In addition, there is usually a requirement that revenues generated from an enterprise exceed debt service on bonds by twenty-five percent (25%). This "coverage" protects the bond holders from minor delinquencies and defaults that may occur.

**Development Impact Fee**
Development Impact Fees (“DIFs”) are monetary exactions (other than taxes or special assessments) that are charged by local agencies in conjunction with approval of a development project and are usually collected at the time building permits or occupancy permits are issued. DIFs are levied for the purpose
of defraying all or a portion of the costs of any public facility, improvement or amenity that benefits the development required to pay the fee. However, DIFs cannot be used to pay for public services. Most cities and counties currently impose DIFs for a broad range of public facilities.

AB 1600, which promulgated Section 66000 and other sections of the Government Code, was enacted by the State of California in 1987 to regulate the imposition of DIFs within the State. AB 1600 requires that all public agencies satisfy a number of requirements when establishing, increasing or imposing a fee as a condition of approval for a development project. These requirements include identifying the facilities to which the collected fee would be applied and determining that there is a reasonable relationship between the facilities to be financed, the benefit received by the development paying the fees, and the amount of the fees being imposed. Water and sewer agencies can impose connection fees or capacity charges, which are similar to DIFs, as specified in Government Code section 66013.

While DIFs and connection fees cannot typically be leveraged (i.e., provide security for bonds or other debt instruments), they can be used in conjunction with debt financing to help retire bonds secured by other means (e.g., a CFD or AD). Development fees can also be used to generate reimbursement revenues to property owners or public agencies that have previously paid more than their fair share of public improvement costs. To the extent that regional water improvements are required of future development, DIFs could be utilized to cover these costs for such development. However, DIFs cannot finance any improvements required by existing development, nor can they fund O&M costs for either new or existing development.

**General Obligation Bonds**

The issuance of general obligation ("G.O.") bonds by a public agency issuer represents a pledge on the issuer's part to levy a uniform ad valorem property tax on all taxable properties within the issuer's jurisdiction in order to annually repay principal and interest due. The bonds are a "general obligation" of the issuer; that is, bondholders have recourse to the "full faith and credit" of the issuer (i.e., unlimited property taxation) to ensure that annual debt service requirements are met. G.O. Bonds may be used to acquire, construct, and improve real property. However, they may not be used to purchase furniture or equipment, or to pay for operations or maintenance.

Prior to 1978, G.O. bonds were, by far, the most popular vehicle for debt financing of infrastructure and public facilities in California. The approval of State Proposition 13 in 1978 quickly brought that era to a close. It was not until 1986, with the passage of State Proposition 46, that resurgence in G.O. bond authorization was seen. This latter proposition reinstated the ability of local public agencies to incur new bonded indebtedness and secure it through the imposition of an ad valorem property tax. Consistent with Proposition 13, however, it was required that two-thirds of the registered voters in the affected territory approve any such measure. In some cases, particularly with certain types of water districts, Improvement Districts may be established which limit the tax levying capability of the issuer and the election regarding the bond issuances to only those properties located within the Improvement District.

Because G.O. Bonds are one of the most secure debt financing instruments available to local public agencies, they generally carry lower interest rates than the other local financing mechanisms being
reviewed in this Report. In addition, the dispersion of debt service costs throughout a jurisdiction helps minimize the taxes to each property owner, as opposed to levying a tax on a special district consisting of a much smaller area. However, the requirement of a two-thirds approval by voters throughout the issuer’s jurisdiction makes it difficult to obtain authorization to sell G.O. bonds.

**Special Assessment District**

There are a number of types of Assessment Districts ("ADs") that can be utilized to fund water supply improvements and maintenance services. Public works improvements are eligible for AD financing to the extent that properties within the AD receive a special, measurable, local and direct benefit from such improvements. Traditionally, improvements to be financed using an AD under the Municipal Improvement Act of 1913 and the Improvement Bond Act of 1915 include, but are not limited to, streets and roads, water, sewer, flood control facilities, utility lines and landscaping. Other types of public improvements which have a "regional" significance (e.g., major roads, bridges, flood control facilities, etc.) are only partially eligible, based on the proportion of benefit from the improvements that can be assigned to parcels within the AD. Traditionally, items of general benefit to a community, such as schools, fire stations and parks, have not been eligible for Assessment District financing. An AD can also provide funding to operate and maintain improvements financed by the AD itself.

The Benefit Assessment Act of 1982 provides more flexibility in providing public services, as road, drainage, flood control and street lighting maintenance services can be funded under this Act, whether not the improvements themselves are funded through the AD. ADs are subject to specific benefit requirements as a result of both their enabling legislation and Proposition 218. As discussed above, under their enabling legislation, public works improvements and services are eligible for AD financing to the extent that properties within the AD receive a special, measurable, local, and direct benefit from such improvements and services. Proposition 218 further emphasized this benefit requirement by requiring that:

> “An agency which proposes to levy an assessment shall identify all parcels which will have a special benefit conferred upon them and upon which an assessment will be imposed. The proportionate special benefit derived by each identified parcel shall be determined in relationship to the entirety of the capital cost of a public improvement or for the cost of the property related service being provided. No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel. Only special benefits are assessable, and an agency must separate the general benefits from the special benefits conferred on a parcel. Parcels within a district that are owned or used by any agency, the State of California or the United States shall not be exempt from assessment unless the agency can demonstrate by clear and convincing evidence that such publicly owned parcels in fact receive no special benefit.”

Proposition 218 defines “special benefit” as the following:

> “Special benefit means a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large. General enhancement of property value does not constitute special benefit.”
It also places the burden of proof on the public agency in any legal action challenging the validity of an assessment:

“In any legal action contesting the validity of any assessment, the burden shall be on the agency to demonstrate that the property or properties in question receive a special benefit over and above the benefits conferred on the public at large and that the amount of any contested assessment is proportional to, and no greater than, the benefits conferred on the property or properties in question.”

Recent court cases discussed in Section C reinforce the special benefit requirements of Proposition 218, making an AD less attractive for funding regional water supply and water quality improvements than many other funding mechanisms.

**Mello-Roos Community Facilities District**

A Community Facilities District (“CFD”) is a funding option that can be used to pay for public infrastructure and services for future development. While a two-thirds vote of the “qualified electors” is required to establish a CFD, the boundaries of a potential CFD could be set so that fewer than twelve registered voters initially reside within the CFD. In this case, the “qualified electors” would be the property owners (not the registered voters), and if a property owner were conditioned to form or annex to a CFD in order to develop his or her property, he would need to agree to include his property in the CFD. While this type of financing would not generate funds to pay for public infrastructure and services for existing development, it could cover a substantial portion of the cost of such facilities and services related to future development and redevelopment.

The Mello-Roos Community Facilities Act (“Act”) was enacted by the California State Legislature in 1982 (Section 53311 et. seq. of the Government Code) to provide an alternate means of financing public infrastructure and services subsequent to the passage of Proposition 13 in 1978. The Act complies with Proposition 13, which permits cities, counties and special districts to create defined areas within their jurisdiction and, by a two-thirds vote within the defined area, impose special taxes to pay for the public improvements and services needed to serve that area. The Act defines the area subject to a special tax as a CFD. If fewer than twelve registered voters reside within a proposed CFD, the property owners within the CFD are defined as the qualified electors. Therefore, if new development and significant redevelopment are required to join a CFD in order to gain entitlements, pull building permits or record a final map or parcel map, the cooperation of a property owner who wishes to develop a parcel can be assured. The Act provides a simple and inexpensive annexation process whereby vacant parcels can annex to a CFD on a parcel-by-parcel basis, as they become developed.

A CFD may provide for the purchase, construction, expansion or rehabilitation of any real or other tangible property (including land) with an estimated useful life of at least five years. It may also finance the costs of planning, design, engineering and consultants involved in the construction of improvements or formation of the CFD. The facilities or real property financed by the CFD do not have to be physically located within the CFD. Any facilities that will be publicly owned, and will have a useful life of five years or more, would qualify for this financing.
Furthermore, a CFD may also pay for certain types of public services, including police, fire, and ambulance services, landscape and park maintenance, street and road maintenance, flood and storm protection services, library and recreational services, and school facilities maintenance. However, a CFD may only finance these services to the extent that they are in addition to those provided within the area of the CFD before the CFD was created, and may not supplant services already available within that area.

Formation of a CFD authorizes the public agency establishing the CFD to levy a special tax on all taxable property within the CFD, as defined in the formation documents. Property owned or irrevocably offered to a public agency may be exempted from the special tax. Mello-Roos special taxes are collected at the same time and in the same manner as regular ad valorem property taxes, unless otherwise specified by the agency. Special tax revenues may be used to pay the debt service on bonds that have been sold to fund the construction or acquisition of public capital facilities, or to pay directly for facilities or public services.

Certificates of Participation or Lease Revenue Bonds
Two long-term funding alternatives that could potentially be used to fund regional water supply and water quality improvements are Certificates of Participation ("COPs") and Lease-Revenue Bonds ("LRBs"). These funding mechanisms provide long-term financing for public improvements via a lease or installment sales structure, as opposed to requiring debt service payments. By establishing a lease obligation, COPs and LRBs avoid being designated as debt, and therefore avoid the election requirement (and the two-thirds vote requirement) mandated by Proposition 13 for all bond sales. As no voter election is required to sell these instruments, a county board of supervisors or a city council could approve a bond sale with a simple majority vote of the legislative body.

In brief, the principal parties to a COPs or LRB financing include a public agency, a non-profit corporation and a trustee. The non-profit corporation may be formed specifically to construct and own the necessary improvements, the funds for which are generated from the proceeds of the COPs or LRB sale. The non-profit corporation may also be an existing agency, such as a joint powers authority or an economic development corporation. However, the actual responsibilities for managing the construction are generally delegated to the public agency. The non-profit corporation then leases or sells the land and facilities back to the public agency in return for lease or installment sales payments.

The investors who purchase the COPs or LRBs receive a specified portion of the public agency’s payments to cover the principal and interest due on their COPs. The certificates or bonds are secured by the public agency’s pledge to make payments to cover its lease or installment sales payments, although there is no requirement that the public agency commit its general fund to making these payments. The trustee is responsible for accepting these payments and then disbursing them to the certificate or bond holders.

There are two major problems associated with COPs or LRBs. First, these instruments can only be used to fund public improvements, not O&M costs. Second, and more significantly, a source of revenues is required to repay the COPs or LRBs, so these mechanisms could not be utilized without monies being
generated by some other source. COPs are generally secured by the covenant of the public agency to make annual appropriations in an amount sufficient to service the certificates. The appropriations may come from the public agency general fund or from a designated special fund, such as the enterprise fund user fees or a CFD. Due to Gann Amendment limitations on general fund spending, the use of general fund monies to make payments on COPs or LRBs would be detrimental to other recipients of general fund monies. However, to the extent that one or a combination of the available funding mechanisms provide a reliable and secure ongoing revenue stream, a public agency can issue COPs or LRBs that are non-recourse to its general fund.

Sewer and water improvements, parking facilities and other revenue-generating public uses can be financed with revenue bonds. Debt service on these bonds may be paid through monthly utility bills, parking fees, and other revenues, etc. Bonds are not sold until sufficient revenues are available to provide a level of bond debt service coverage which is acceptable to the municipal bond market. As water rates are already used to fund the ongoing cost of providing water, financing new water facilities through the use of public enterprise revenue bonds will often require an increase in water rates.

Table 8-1 Traditional Finance Measures

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<thead>
<tr>
<th>Financing Mechanism</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Tax Measure</td>
<td>• Can provide a fairly consistent source of funding</td>
<td>• Requires a 2/3 vote; Can be regressive in nature when calculated as a function of income</td>
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<tr>
<td></td>
<td>• Can fund any facilities or services specified in ballot materials</td>
<td>• Currently preempted by State 0.25% sales tax increase</td>
</tr>
<tr>
<td>Stormwater Utility Fee</td>
<td>• Can apply to every parcel in the area adopting the fee</td>
<td>• Will require property owner or registered voter election</td>
</tr>
<tr>
<td></td>
<td>• Can pay O&amp;M or capital costs</td>
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<tr>
<td></td>
<td>• Can be implemented on municipality, watershed, or WMA basis</td>
<td></td>
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<tr>
<td>Water User Fee</td>
<td>• No election requirement under Proposition 218; but ballot protest process is recommended</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No legal constraints on raising funds other than nexus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Can pay O&amp;M or capital costs</td>
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<tr>
<td>Sewer User Fee</td>
<td>• No election requirement under Proposition 218; but ballot protest process is recommended</td>
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<th>Financing Mechanism</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Refuse Collection Fee</td>
<td>• No election requirement under Proposition 218; but ballot protest process is recommended&lt;br&gt;• No legal constraints on raising funds other than nexus&lt;br&gt;• Can pay O&amp;M or capital costs</td>
<td>• Public agencies can only control rates charged to users through negotiation with private entities</td>
</tr>
<tr>
<td>Public Enterprise Revenue Bonds</td>
<td>• Customarily finance water and sewer systems.&lt;br&gt;• Lower interest rate than land-secured bonds</td>
<td>• Requires stable revenue stream which exceeds debt service by 25%</td>
</tr>
<tr>
<td>Development Impact Fees</td>
<td>• No voter approval required&lt;br&gt;• Can be used to reimburse public agencies and developers for over sizing capital improvements</td>
<td>• Can only pay for capital improvements needed for new development</td>
</tr>
<tr>
<td>General Obligation Bonds</td>
<td>• Carry lower interest rates than the other local financing alternatives&lt;br&gt;• Greater dispersion of debt service costs throughout a jurisdiction helps minimize the taxes to each property owner, as opposed to levying a tax on a special district consisting of a much smaller area</td>
<td></td>
</tr>
<tr>
<td>Special Assessment Districts</td>
<td>• Spreads costs equitably&lt;br&gt;• Can finance certain facility and O&amp;M costs</td>
<td>• Public agencies can only control rates charged to users through negotiation with private entities</td>
</tr>
<tr>
<td>Mello Roos Community Facilities District</td>
<td>• Can pay O&amp;M or capital costs&lt;br&gt;• Can pay capital costs anywhere within the jurisdiction forming the CFD</td>
<td>• Requires 2/3 vote of qualified electors so would probably only apply to new development and redevelopment&lt;br&gt;• Can only be used to fund increased services (not existing services) that benefit the parcels within the CFD</td>
</tr>
<tr>
<td>Certificates of Participation and Lease Revenue Bonds</td>
<td>• Can be adopted by legislative body, as no voter approval required&lt;br&gt;• Can be used to pay for capital improvements</td>
<td>• Need to find source of reliable revenues to pay interest and principal. Interest rates charged tend to be higher if repayment revenues aren’t predictable&lt;br&gt;• Statutory and constitutional limitations on the size of municipal debt may apply</td>
</tr>
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</table>
Creative Funding Mechanisms

Local Infrastructure Bank
In general, an infrastructure bank is an entity that manages capital and provides loans for infrastructure development. Similar to a State or Federal infrastructure bank, a local infrastructure bank run by SAWPA could potentially provide funding for a range of water supply and water quality projects. In theory, SAWPA member agencies and other stakeholders could invest funds in a pool managed by SAWPA. SAWPA could then loan these funds back to certain local agencies to fund regional infrastructure. Further investigation of this option is needed.

Water/Energy Nexus
Since the California Energy Commission (“CEC”) issued its landmark finding in 2005 – that water-related energy uses account for about 19% of all electricity and 30% of non-power plant natural gas used within the state – California’s water and energy sectors have been collaborating on strategies for achieving the incremental resource, economic and environmental benefits that can be found at the intersection of water, energy and climate. In 2006, a multi-agency Water-Energy Team was established to assist the Governor’s Climate Action Team in identifying and promulgating statewide strategies for reducing water-sector greenhouse gases (“GHGs”). About the same time, the CEC commenced development of its first water-energy research program. The California Public Utilities Commission (“CPUC”) conducted workshops to explore whether and how the water-energy nexus should be included in the state’s regulated energy programs. Concurrently, the DWR commenced investigations as to how the linkages among water, energy and climate should be included in the state’s water planning processes. In addition, the Federal Environmental Protection Agency has a Sustainable Infrastructure program which is intended to help water and wastewater utilities to conserve water, be more energy efficient, and adapt to the impacts of climate change.

The water sector has unique capabilities for substantially changing the amount, time and place of its consumption of electricity. Since energy is the single largest ongoing expense for water system operations and maintenance; if energy usage is made more efficient, water agencies will see significant savings. These savings will free up money that can be used for water supply and water quality improvements.

Public Private Partnerships
A Public Private Partnership (“PPP”) customarily involves a contract between a public sector organization and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project. In some types of PPP, the cost of using the service is borne exclusively by the users of the service and not by the taxpayer. In other types (notably the private finance initiative), capital investment is made by the private sector on the basis of a contract with government to provide agreed services and the cost of providing the service is borne wholly or in part by the government. Government contributions to a PPP may also be in kind (notably the transfer of existing assets). In projects that are aimed at creating public improvements like in the infrastructure sector, the government may provide a capital subsidy in the form of a one-time grant, so as to make it more attractive to the private investors. In some other cases, the government may support the project by providing revenue subsidies, including tax breaks or by removing guaranteed
Typically, a public sector consortium forms a special company called a "special purpose vehicle" ("SPV") to develop, build, maintain and operate the asset for the contracted period. In cases where the government has invested in the project, it is typically (but not always) allotted an equity share in the SPV. It is the SPV that signs the contract with the government and with subcontractors to build the facility and then maintain it. In the infrastructure sector, complex arrangements and contracts that guarantee and secure the cash flows make PPP projects prime candidates for project financing. Two examples of PPPs are discussed on the next page.

**West Coast Infrastructure Exchange**
Funded by two Rockefeller Foundation grants totaling $750,000, the West Coast Infrastructure Exchange ("Exchange") is a start-up non-profit entity that was established to tap into the expertise of development and finance leaders to save money, find innovative financing methods and achieve cost savings via collaboration in order to make projects more feasible. Participating jurisdictions include the states of California, Oregon and Washington, as well as, British Columbia. The goal of the exchange is to explore ideas together, to share best practices and technical expertise, to help identify infrastructure projects that might help benefit from some private involvement, and to work together to find out what projects might be bundled to make them more appealing to the private sector. Target infrastructure investment opportunities include, but are not limited to energy transmission and efficiency, water storage capacity, municipal water systems and wastewater management.

During the start-up phase, through 2013, the Exchange will operate with an interim management team representing each partner office, coordinated by the Oregon State Treasury. Committees will begin to establish a framework for evaluating projects. The Exchange will seek a director with experience in public infrastructure management. After those steps have been completed, the Exchange will begin serving as an information source and develop a process for connecting projects to financing, potentially including private capital.

By establishing a center of expertise to provide technical assistance, setting standards and providing investment information, and simultaneously advancing new mechanisms for project finance the Exchange has the potential to attract large private institutional investors.

The following table (Table 8-2) compares traditional project operations to the Exchange’s performance-based methodology.
Table 8-2 Comparison between Traditional Projects

Assessing the WCX

The West Coast Infrastructure Exchange is employing a performance-based infrastructure, which approaches project management differently than traditional models, the ways in which are detailed in the chart below (click to enlarge).

<table>
<thead>
<tr>
<th>Types of Projects</th>
<th>Traditional</th>
<th>Performance-Based Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited analysis of alternatives, focus on capacity additions</td>
<td>Thorough analysis of alternatives, consider demand and supply side solutions equally, benefit-cost analysis drives decision-making</td>
<td></td>
</tr>
<tr>
<td>Project planning doesn’t consider impact of climate change</td>
<td>Project planning accounts for predicted changes in sea level, precipitation and extreme weather events</td>
<td></td>
</tr>
<tr>
<td>Each jurisdiction finances and delivers projects on their own</td>
<td>Jurisdictions plan together and pool resources to lower project costs and deliver better regional outcomes</td>
<td></td>
</tr>
<tr>
<td>Projects funded through general taxes, gas taxes, and federal grants</td>
<td>Projects funded with user fees such as variable tolls for highways and bridges</td>
<td></td>
</tr>
<tr>
<td>Design-Bid-Build: One group designs the project and an entirely separate group with the low bid builds the project</td>
<td>Design-Build-Operate-Maintain: Public owner contracts with one entity for best value on delivered infrastructure services over life of project</td>
<td></td>
</tr>
<tr>
<td>Design-Build-Finance-Maintain: Public owner contracts with one entity which delivers financing and project with best value for public owner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax-exempt debt offers lowest cost of capital for public projects</td>
<td>Taxable debt in context of public-private partnership delivers more value to public</td>
<td></td>
</tr>
</tbody>
</table>

Chart courtesy of westcoastx.com

Pace Program

Property Assessed Clean Energy ("PACE") programs enable property owners to finance private “green” improvements including water conservation improvements, as well as, solar panels, heating and air conditioning systems, pool filtration equipment, windows and doors, water conservation improvements, fuel cells and other types of energy saving improvements. The funding for the improvements is repaid through an annual assessment on the property tax bill. DTA currently serves as the Assessment Engineer for Western Riverside Council of Government’s ("WRCOG") HERO Program for Western Riverside County as well as WRCOG’s statewide California HERO Program. The HERO Program is WRCOG's version of a PACE Program, which offers qualified property the opportunity to finance energy
efficiency and water conservation improvements for their properties.

Since the HERO Program was launched in early 2012, 7,897 applications have been received, with 5,157 approved for energy improvements totaling $146.15 million. Approximately $36.1 million in bonds have been closed to date to fund eligible improvements.

To the extent that local property owners reduce their water and/or energy usage through a PACE program, the demand for new water and other infrastructure may be reduced.

**Government Legislation**

Government Code Section 5956 et seq. allows local governmental agencies (including cities, counties and special districts) to use design-build to construct “fee producing infrastructure facilities.” The legislation expressly allows facilities that provide water supply, treatment and distribution. This authority is limited to privatization transactions where the private entity will operate and maintain facility.

**Crowd Sourcing**

Crowd funding, also referred to as crowd financing or crowd sourced capital, is the practice of developing an online group-based investment campaign to generate financing for a specific project. This practice leverages dedicated internet fundraising websites to spur community support and financing for an assortment of ventures, including architectural, through numerous small dollar investors. The campaign owner is provided the opportunity to petition a wide variety of potential investors as opposed to solely relying on angel investors or venture capitalists. The investing public is protected from outsized loses through the nature of the small dollar contributions with the risk spread across a larger population.

Crowdfunding refers to any kind of capital formation where both funding needs and funding purposes are communicated broadly via an open call in a forum where the call can be evaluated by a large group of individuals, the crowd. The outreach is referred to as a crowdfunding campaign and the person or company in charge of the campaign is referred to as the campaign owner.

**Donation-Based Crowdfunding**

The type of crowd funding that comes closest to our traditional understanding of online fundraising is donation-based crowdfunding. With this model, tangible returns are not the reason for individual contributions, and thus the success of the campaign is solely determined by the crowd's identification with or emotional attachment to the campaign’s cause. A common example is a community project that would otherwise require municipal or other government funding. In a report released in May 2012, Massolution’s Crowdfunding Industry Report estimated the aggregate crowdfunding volume throughout 2011 was close to $1.5 billion, of which almost half was raised via donation-based crowdfunding as described above. The main benefit of donation-based crowdfunding is that the campaign owner does not need to compensate the crowd once the funding is secured. The challenge, however, is that the crowd needs to identify or have an emotional connection with the campaign cause itself. Donation-based crowdfunding is ideal for projects that do not have something tangible to offer in return for the funds raised. In order to activate the accessible crowd it is important to communicate why no other
means of funding is available. On top of that, the project itself needs to appeal either via identification or emotion in order to get individuals to contribute but also to get them to spread the word of the project on to likeminded crowdfunders. In a crowdfunding ecosystem it is crucial to make the purpose of the call for capital as clear as possible as raising funds for vague purposes can make it difficult for the individual crowdfunders to truly identify themselves with the campaign. Donation-based crowdfunding is therefore the model that will require the most carefully thoughtful communications strategy, and the most persistent communications effort.

While donations are granted due to either identification or an emotional attachment to the project’s cause and/or urgency, rewards have to be interesting themselves, meaning the campaign has to offer a set of rewards that are economically sound or in some way relevant to the campaign.

Recreational walking/biking trails along river trails (which actually are stormwater flood control channels) are potential candidates for crowdsourcing. Similar to the signs along freeways acknowledging contributions for maintenance, SAWPA may use a similar signage program to reward donors with advertising. This concept appears to work best in funding operations and maintenance.

The concept may also be applied to infrastructure funding. The most familiar application is school and universities establishing building fund campaigns for a new sports facility. Religious organizations often have campaigns to raise funding to build new churches. However, public appetite for funding water infrastructure through crowdsourcing may be limited.

Energy Service Company (“ESCO”) And Energy Saving Performance Contract (“ESPC”)

An Energy Service Company (“ESCO”) is a business that develops, installs, and arranges financing for projects designed to improve the energy efficiency and maintenance costs for facilities over a seven to twenty year time period. ESCOs generally act as project developers for a wide range of tasks and assume the technical and performance risk associated with the project. Typically, they offer the following services:

- develop, design, and arrange financing for energy efficiency projects
- install and maintain the energy efficient equipment involved
- measure, monitor, and verify the project’s energy savings
- assume the risk that the project will save the amount of energy guaranteed

These services are bundled into the project’s cost and are repaid through the dollar savings generated.

What sets ESCOs apart from other firms that offer energy efficiency, like consulting firms and equipment contractors, is the concept of performance-based contracting. When an ESCO undertakes a project, the company's compensation, and often the project's financing, is directly linked to the amount of energy that is actually saved.

Typically, the comprehensive energy efficiency retrofits inherent in ESCO projects require a large initial capital investment and offer a relatively long payback period. The customer's debt payments are tied to
the energy savings offered under the project so that the customer pays for the capital improvement with the money that comes out of the difference between pre-installation and post-installation energy use and other costs. For this reason, ESCOs have led the effort to verify, rather than estimate energy savings. One of the most accurate means of measurement is the relatively new practice of metering, which is direct tracking of energy savings according to sanctioned engineering protocols.

Most performance-based energy efficiency projects include the maintenance of all or some portion of the new high-energy equipment over the life of the contract. The cost of this ongoing maintenance is folded into the overall cost of the project. Therefore, during the life of the contract, the customer receives the benefit of reduced maintenance costs, in addition to reduced energy costs. As an additional service in most contracts, the ESCO provides any specialized training needed so that the customer's maintenance staff can take over at the end of the contract period.

Energy Savings Performance Contracts (“ESPCs”), also known as Energy Performance Contracts (“EPCs”), are an alternative financing mechanism authorized by the United States Congress designed to accelerate investment in cost effective energy conservation measures in existing Federal buildings.

ESPCs allow Federal agencies to accomplish energy savings projects without up-front capital costs and without special Congressional appropriations. The Energy Policy Act of 1992 (EPACT 1992) authorized Federal agencies to use private sector financing to implement energy conservation methods and energy efficiency technologies. An ESPC is a partnership between a Federal agency and an ESCO. The ESCO conducts a comprehensive energy audit for the Federal facility and identifies improvements to save energy. In consultation with the Federal agency, the ESCO designs and constructs a project that meets the agency's needs and arranges the necessary financing. The ESCO guarantees that the improvements will generate energy cost savings sufficient to pay for the project over the term of the contract. After the contract ends, all additional cost savings accrue to the agency.


**Regional General Obligation Bond**

With a traditional General Obligation bond, as discussed in Section III.D.1.(f), bonds are issued by a public agency, based on a pledge of the ad valorem property taxes for all (or a portion) of the properties within the issuer's jurisdiction. Recently, Joseph Zoba, General Manager at Yucaipa Valley Water District, has proposed the use of regional general obligation bonds to raise funds regionally to be used for regional projects. This would avoid the time consuming and expensive Federal and State processes to compete for funds. A regional general obligation bond program would be administered locally for
greater local control, and would require regional partners to work together closely in developing regional solutions.

It is unclear whether a regional general obligation bond could be implemented without modifications to the existing enabling legislation. In addition, there would be many challenges for such a program including defining boundaries and achieving the 2/3 vote necessary to establish such a program.

Conclusions
As stated in the Introduction, SAWPA engaged David Taussig and Associates, Inc. ("DTA") to investigate financing alternatives for public facilities and regional planning. In addition to its many years of successes regarding all facets of financing public infrastructure, DTA has furthered its expertise by recently working with other significant public agencies, including the California Department of Water Resources, to research current state-of-the-art financing methodologies.

The following are DTA’s general observations, recommendations and conclusions regarding this review of financing methodologies for SAWPA (specific recommendations are described in detail in the body of the report):

• Throughout the prosecution of this assignment, DTA conducted many interviews with recognized leading public finance experts and reviewed the body of current, available industry documents and communications. Consistent throughout DTA’s research, SAWPA is universally regarded as one of, if not the most highly regarded IRWMs in California. SAWPA has outstanding leadership, is staffed by practitioners who are recognized industry-wide for their expertise in their assigned specialties, and most noteworthy, SAWPA has a dynamic organizational structure that is focused on continual improvement, flexibility and creativity in seeking solutions to both SAWPA’s and the water industry’s challenges.

• This document presents feasible and realistic funding alternatives for regional water projects and integrated water infrastructure planning highlighting innovative new approaches, the effect of current public financing policies and summarizing industry “best practices” to fund the integrated planning required to construct regional water and water quality improvements.

• There exists a structural incongruity between current legislation, watersheds and the systemic structure in which watersheds are managed. Watersheds are rarely, if ever, regulated, served or are the responsibility of a single governmental entity. Literally dependent entirely on the lay of the land, the topography of a broad region determines a watershed’s boundaries. In most, if not all cases, watersheds span multiple counties. Current legislation does not provide a means of assigning the functional and financial responsibility for managing this valuable natural resource as a complete integrated system. This piecemeal management system engenders philosophical conflicts, inconsistent management protocols and is inherently inefficient.

• Even though a few progressive and thoughtful ad hoc cooperative alliances exist between some counties, regional governmental entities with responsibility, authority and funding to manage significant watersheds do not currently exist. With the current funding alternatives and their respective requirements (voter approval thresholds, etc.) regional funding is not feasible. Without
funding, responsible administration with backbone is impossible.

Limitations of Report
The conclusions and recommendations in this report rely on the information provided to DTA at the time of the writing of the Report by the following parties was true, correct, and complete:

1. The Santa Ana Watershed Project Authority
2. The California State Department of Water Resources