



September 15, 2021

**TO:** Utilities Advisory Committee

**FROM:** Ron Munds, General Manager

**SUBJECT: Agenda Item 4 – 09/15/2021 UAC Meeting**  
Los Osos Basin Plan Implementation Summary and Water Supply Resiliency Report

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**STAFF RECOMMENDATION**

Review and discuss the summary of the Basin Plan and implementation status and the County's Regional Water Infrastructure Resiliency Plan.

**DISCUSSION**

**Summary of the Basin Plan Implementation**

The goals of the Basin plan are divided into two categories: Immediate and Continuing. Immediate Goals were designed to balance supplies and demands in the Basin for the immediate future and were to be pursued at the commencement of Basin Plan implementation. Continuing Goals were to be implemented over time in order to promote and maintain the long-term balance and health of the Basin. The goals are as follows.

***Immediate Goals***

1. Halt or, to the extent possible, reverse seawater intrusion into the Basin.
2. Provide sustainable water supplies for existing residential, commercial, community and agricultural development overlying the Basin.
3. Set water conservation goals and establish mandatory standards and policies that promote water use efficiency and innovation for residential, commercial and institutional water users for both indoor and outdoor usage.

***Continuing Goals***

- Provide for a continuously updated hydrologic assessment of the Basin, its water resources and sustainable yield.
- Create a water resource accounting which is able to meet the information needs for planning, monitoring, trading, environmental management, utility operations, land development and agricultural operations.
- Establish a strategy for maximizing the reasonable and beneficial use of Basin water resources.
- Provide sustainable water supplies for future development within Los Osos, consistent with local land use planning policies.
- Set water conservation goals and establish strategies to promote water use efficiency and innovation for agricultural water users, including use of recycled water.

- Clarify the assignment of risk arising from future changes in the availability of groundwater for extraction.
- Allocate costs equitably among all who benefit from the Basin's water resources.
- Protect water quality in the Basin.
- Protect environmentally sensitive areas within the Basin or influenced by Basin hydrology.
- Develop strategies to maximize grant and other funding and financing opportunities for ongoing Basin Plan implementation.

### ***Basin Plan Programs***

The Basin Plan analyzes seven potential programs of action, each of which focuses on a different aspect of the Basin Management. Programs, such as the Urban Water Use Efficiency Program, are directed at reducing the demand for water from the Basin, while other programs, such as the Basin Infrastructure Program (A through D), focus on increasing the sustainable yield of the Basin. Several programs, including the Water Reinvestment Program and Supplemental Water Program, are hybrids, with both demand- and supply-side impacts. Implementation of an identified combination of programs is expected to achieve a sustainable Basin. To date, all Basin Plan actions that have been implemented have been undertaken by the parties to the Stipulated Judgement. The Basin Plan Infrastructure Program implementation status (source: 2020 BMC Annual report) table is included as an attachment to this report.

Not included in the table is the Water Reinvestment Program which is recycled water from the Los Osos Water Reclamation Facility operated by the County. The bulk of the water from this project goes to the Broderson leach field for groundwater recharge. To date, a majority of the Urban Water Use Efficiency Program was implemented as part of the Prohibition Zone retrofit program associated with the wastewater project.

### ***Basin Metrics – Groundwater Monitoring Results***

To determine the effectiveness of the projects and programs implemented and their impacts on managing the impacts of nitrates in the Upper Aquifer and seawater intrusion into the Lower Aquifer, the Basin Plan has established four monitoring metrics. The metrics allow the Basin Management Committee, regulatory agencies and the public to evaluate the status of nitrate levels and seawater intrusion in the Basin through objective, numerical criteria that can be tracked over time. The BMC is in the process of evaluating all the metrics as part of their 2021 work plan as recommended in the Basin Plan. The following is a brief description of each metric.

**Basin Yield Metric-** The Basin Yield Metric compares the actual amount of groundwater extracted in a given year with the estimated sustainable yield of the Basin under then-current conditions with a goal of being of a numeric value of 80 or less.

**Water Level Metric-** The Water Level Metric is defined as the average Spring groundwater elevation, measured in feet above mean sea level, in five Lower Aquifer wells with a goal to be 8 feet above the sea level mean.

**Chloride Metric-** The Chloride Metric is defined as the weighted average concentration of chlorides in four key Lower Aquifer wells with a goal of being 100 mg/L or lower.

**Nitrate Metric-** The Nitrate Metric is defined as the average concentration of nitrate in five First Water key wells located in areas of the Basin that have been impacted by elevated nitrate concentrations with a goal of being 10 mg/L or lower.

The following table provides the results of monitoring data as it relates to the Basin Metrics since 2015.

Metric	Basin Plan Goal	2015	2016	2017	2018	2019	2020
Basin Yield	80 or less	89	78	75	74	69	73
Water Level	8 ft. above sea level mean	0.6	1.0	1.5	2.0	1.8	1.8
Chloride	100 mg/L or lower	188	225	132	145	162	205
Nitrate	10 mg/L or lower	25.4	26	32	24	22	20

### **Groundwater Basin Sustainability Concerns**

With six years of monitoring data now available, the results of the implementation of the Basin Plan are mixed. Based on the trends and monitoring results in the previous Annual Reports, it may take several more years before it is possible to determine whether implementation of the Basin Plan has been successful in reversing seawater intrusion and improving other unfavorable water quality trends for existing residence let alone new development. The three water purveyors are in agreement that prior to being asked to serve additional demand, the Basin Metrics must indicate not only an end to deteriorating conditions but measurable and sustainable improvements across the Basin. It is also agreed that it may be necessary to consider creative water supply options, such as supplemental or imported water, in order to solve the long-term water issues within the Basin.

### **SLO County Water Conservation and Flood Control District’s Regional Water Infrastructure Resiliency Plan (RWIRP)**

As an introduction to the RWIRP, back in 2012, the SLO County Flood Control & Water Conservation District (Flood Control District) had completed Master Water Report included a number of recommendations to improve regional water supply reliability and resilience in SLO County. The highest priority identified for the Flood Control District was to optimize the use of all water resources and water infrastructure available within the County including State Water, Salinas Reservoir, Whale Rock Reservoir, Lopez Reservoir and the Nacimiento Water Project.

During the peak of the unprecedented drought that occurred from 2012 to 2017, it became clear that coordination between staff of the municipal water purveyors that are connected to regional water supply projects would be necessary for exploring resiliency strategies. Key water agency staff, referred to as the Countywide Water Action Team (CWAT), began to meet to develop an approach for moving forward on the recommendations in the Master Water Report and potential new regional resiliency concepts in light of the unprecedented drought.

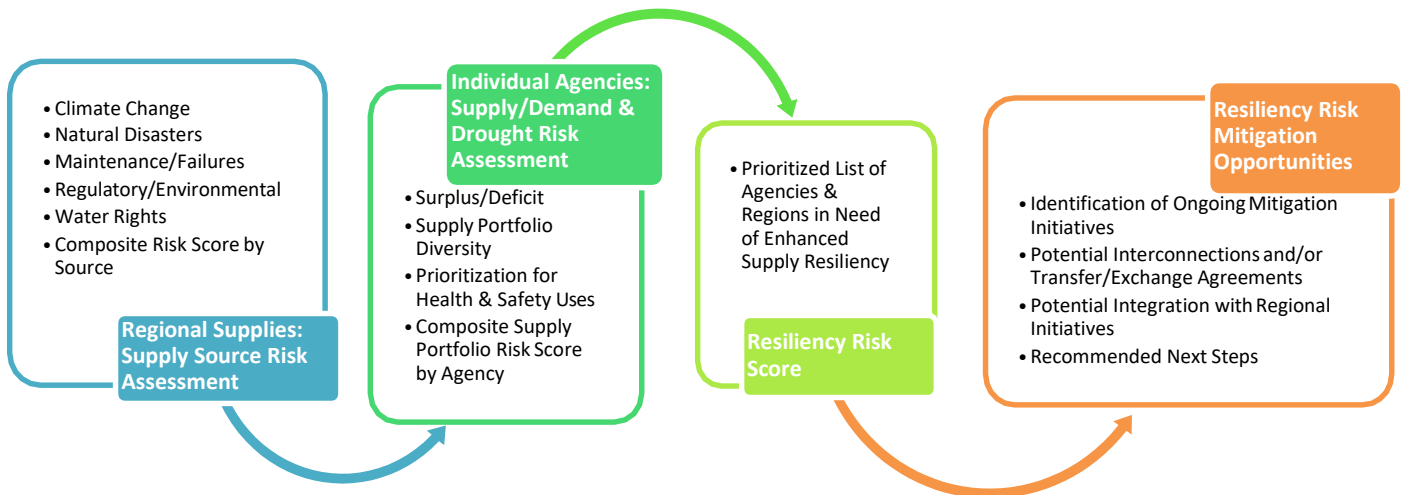
Building on the 2012 Master Water Report recommendations and potential new regional resiliency concepts, the CWAT identified four priority areas to focus on concepts that related to use of regional infrastructure that were not being led by another entity or group:

1. **Infrastructure Interties and Agreements:** Develop this Regional Water Infrastructure Resiliency Plan (RWIRP) to identify opportunities to move water through existing or new interconnected water systems to address critical water supply vulnerabilities.
2. **Countywide Water Emergency Planning:** Document drought response actions and opportunities in the recently completed Countywide Local Hazard Mitigation Plan (LHMP), Integrated Regional Water Management (IRWM) Plan and other plans as appropriate and as it relates to potential State requirements.

3. **Salinas Dam:** Evaluate the feasibility and potential benefits associated with transferring the facilities to District ownership and installing gates to increase the storage volume.
4. **Desalination:** Begin discussing the conditions under which a regional project may be feasible.

A major component of the RWIRP is the analysis of regional water supply vulnerabilities, identification of projects and/or transfer/exchange/water sales opportunities to improve water supply resiliency, and development of a framework to facilitate inter-agency collaboration amongst San Luis Obispo County water purveyors. The steps the CWAT utilized to develop the RWIRP are listed below and described in the figure.

Supply/Demand Assessment  
 Drought Risk Assessment  
 Supply Source Risk Assessment  
 Resiliency Score  
 Resiliency Risk Mitigation Opportunities Evaluation



### ***Regional Water Infrastructure Resiliency Plan Results***

Applying the previously referenced steps to develop the RWIRP, a series of water supply assessments were analyzed to create risk and vulnerability scores for water agencies throughout the County. Of course, of most interest to the District is the analysis of Los Osos. Though Los Osos ranked number 9 overall on the resiliency risk rankings (out of 41 agencies; pages 27-29 in the report), the community as a whole were in the top 5 for the highest risk because our single source of water with no planned mitigation opportunities in the works.

### **Report Summary**

It is important for the Board and community to understand the complexities of water supply planning in these uncertain times of climate change. Though the Basin Plan is an excellent roadmap for project and program implementation that may stabilize the Basin, there are many assumptions built into the Basin Plan that could take years to realize and there are no guarantees that each element will achieve the expected result. It has been estimated that it could take another five plus years to know if the Basin Plan is working as designed.

RWIRP provides a useful snapshot into what is needed by communities to become water supply resilient. The areas that are least vulnerable have multiple sources (two or more) of water which is essential in water supply planning especially in California. Given the vulnerabilities identified in the RWIRP for Los Osos and the reservations of the success related to the Basin Plan implementation, staff is recommending that the Board provide direction to seek opportunities to diversify the District's water portfolio, in particular, an intertie to the State Water Project and/or Morro Bay's water system.

As regional water projects are identified and built in the future, an inter-connection to the regional water system is essential. As stated previously, with the uncertainties of climate change, especially when projecting out 30 to 50 years, the water supply diversification decisions we make today will impact the quality of life for both our current population and future generations to come.

### **Attachments**

Basin Plan Implementation Table

SLO County Flood Control and Water Conservation District's Regional Water Infrastructure Resiliency Plan (Executive Summary Only; entire document at [www.losososcsd.org](http://www.losososcsd.org))

Basin Plan available online at [https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Los-Osos-Basin-Management-Committee-\(BMC\).aspx](https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Los-Osos-Basin-Management-Committee-(BMC).aspx)

# Final Draft Regional Water Infrastructure Resiliency Plan

for the

San Luis Obispo County Flood Control & Water Conservation District



Prepared Under the Responsible Charge of:

Daniel Heimel, PE

California R.C.E. No. 80762, Expires 3/31/2023



7/30/2021



**Thank you for your interest in County-wide water resiliency planning. Please note:**

The Draft Regional Water Infrastructure Resiliency Plan began in 2018 in response to the drought in the 2010s. It provides a point-in-time overview of the available water supply, current and future water demand, and a qualitative evaluation of resiliency for 40 water systems in SLO County. This “qualitative evaluation of resiliency” considered the potential effects of droughts, climate change, critical failure/disaster, and more.

This report includes a point-in-time “compilation of readily available” water supply and demand information needed to develop a relative ranking of resiliency, and is not intended to be the authority on specific agency water production and demand data. For example, this analysis was developed prior to the release of the 2020 Urban Water Management Plan (UWMPs) for the larger purveyors. The footnote in Appendix E contains information regarding the sources of data in the various report tables. Please coordinate with the specific water agency regarding their water related data.

The evaluation serves as a starting point for vetting long-term solutions (e.g. connection to a second source of supply via an intertie and mutually beneficial agreement) for those agencies estimated to have the least relative resiliency and no known mitigation measure(s). Also, District staff intends to include the methodology of this draft report in the forthcoming update to the County-wide Master Water Report, which will allow the County to track resiliency as UWMPs and similar plans are updated over time.

# Acknowledgements

The Regional Water Infrastructure Resiliency Plan was prepared through the collaborative efforts of the San Luis Obispo County Flood Control & Water Conservation District, the Countywide Water Action Team and Water Systems Consulting, Inc.



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# 1 EXECUTIVE SUMMARY

## 1.1 PURPOSE, OBJECTIVES, PROCESS AND OUTCOMES

### **What is the purpose of the Regional Water Infrastructure Resiliency Plan (RWIRP)?**

The purpose of the RWIRP is to develop:

- A structured analysis of San Luis Obispo County’s regional water supply vulnerabilities and opportunities to improve resiliency.
- A framework for supply reliability and resilience information that facilitates collaboration amongst San Luis Obispo County water purveyors to further resiliency initiatives.

### **What are the objectives of the RWIRP?**

The objectives of the RWIRP include the following:

1. Fulfill 2012 San Luis Obispo County Master Water Report (2012 Master Water Report) recommendations.
2. Address one of the critical Countywide Water Action Team (CWAT) priority focus areas.
3. Aid in meeting State-mandated drought planning requirements per Assembly Bill 1668
4. Integrate local and regional water planning efforts.
5. Provide a launching pad for a “living document” for project planning & collaboration, funding opportunities, and implementation.
6. Support preparedness for the inevitability of future droughts and water shortages due to climate change, natural disasters, infrastructure maintenance and failures, regulatory/environmental considerations, and water rights factors.
7. Utilize “green light” thinking to identify how regional resources could be connected based on an engineering perspective, with the understanding that regulatory, political and economic factors would need to be considered to determine the ultimate feasibility of the concepts.

### **What was the RWIRP’s process used to fulfill the purpose and objectives?**

The steps the CWAT utilized to develop the RWIRP are described below and shown in Figure 1 below.

**Supply/Demand Assessment** – The Supply/Demand Assessment includes a compilation of readily available information on each water purveyor’s water supply availability, anticipated demands and existing exchange/transfer agreements.

**Drought Risk Assessment** – The Drought Risk Assessment evaluates and quantifies each purveyor’s water supply portfolio’s ability to reliably provide water during extended drought conditions.

**Supply Source Risk Assessment** – The Supply Source Risk Assessment evaluates the vulnerability of each of the major water supply sources to Climate Change, Natural Disaster, Maintenance Shutdowns and Failures, and Regulatory, Environmental and Water Rights challenges. An aggregate Supply Source Risk

Score is evaluated for each purveyor based on the percentage that each supply source makes up of its water supply portfolio.

**Resiliency Risk Score** – The Resiliency Risk Score combines the Drought Risk and Supply Source Risk Assessments scores, along with additional scoring criteria, to develop a combined Resiliency Risk Score for each purveyor and a prioritized list of agencies in need of enhanced resiliency.

**Resiliency Risk Mitigation Opportunities Evaluation** – Resiliency Risk Mitigation Opportunities Evaluation identifies and evaluates mitigation opportunities to improve water supply reliability for the most vulnerable purveyors.

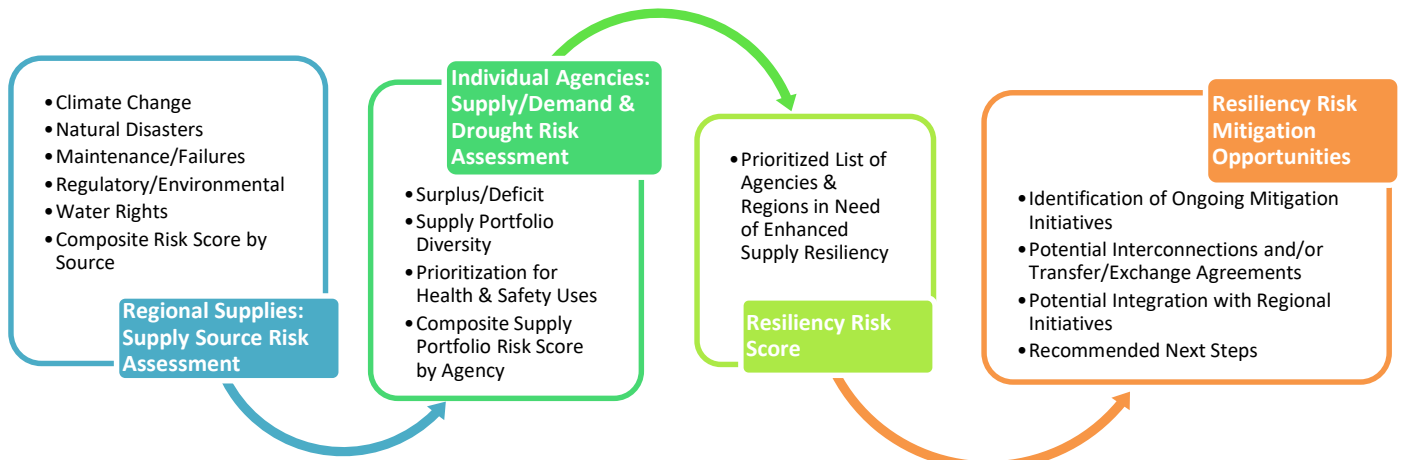


Figure 1. RWIRP Methodology

**What are the conclusions of the RWIRP?**

The Resiliency Risk Evaluation identified a number of agencies that have elevated resiliency risk scores and are Potentially Vulnerable to extended drought or infrastructure failure conditions. The majority of these agencies are already working on Resiliency Risk Mitigation Opportunities (i.e. resiliency improvement projects, interconnections and/or transfer/exchange agreements to improve water supply resiliency). However, there were five agencies in four regions (San Miguel, Edna, Los Osos & Chorro Valley) that the CWAT identified as potentially vulnerable and that could benefit from improved water supply resiliency.

Of the agencies and regions identified as Potentially Vulnerable and without identified Resiliency Risk Mitigation Opportunities, one was determined to be isolated from the regional water conveyance infrastructure and neighboring agencies and thus not able to improve resiliency through readily achievable interconnections and/or transfer/exchange agreements. Though the CWAT did not identify Resiliency Risk Mitigation Opportunities for this agency, potential vulnerabilities warrant further investigation to determine potential projects or other opportunities to improve water supply resiliency.

The remaining four regions were determined by the CWAT to be located within sufficient proximity to the regional infrastructure or neighboring agencies to warrant investigation of potential interconnection and/or transfer/exchange opportunities to improve resiliency. For these agencies, the CWAT identified potential Resiliency Risk Mitigation Opportunities and performed a high-level scoring and ranking evaluation to assist the San Luis Obispo County Flood Control & Water Conservation District (District) and the Potentially Vulnerable agencies in identifying preferred resiliency improvement opportunities and taking the next steps toward implementation.

The majority of the Resiliency Risk Mitigation Opportunities identified by the CWAT included connecting the Potentially Vulnerable agencies with regional conveyance infrastructure or developing an interconnection and/or transfer/exchange agreement with a neighboring agency with a more resilient water supply portfolio. Connections to the State Water Project (SWP) and the Nacimiento Water Project (NWP) were identified as potential opportunities to improve resiliency for the majority of the Potentially Vulnerable agencies. Specific outcomes for each region with Potentially Vulnerable agencies are described as follows:

**San Miguel** – The highest ranking Resiliency Risk Mitigation Opportunity identified for San Miguel included purchasing Salinas River water rights from an upstream water rights holder and pumping underflow from new gallery wells. Alternatively, NWP water could potentially be percolated, but that would require use of recharge facilities, which was not included in this analysis. Agencies in the region see this project and other interconnections as an engineering opportunity but anticipate that cost would make them infeasible unless integrated into a larger regional project with Camp Roberts or another agency to make them more economically feasible. Furthermore, San Miguel CSD is pursuing optimized use of their well field or other potential well sites and developing recycled water to offset potable use.

**Edna** – The highest ranking Resiliency Risk Mitigation Opportunity identified for Edna included connecting to the SWP pipeline and purchasing SWP Water. An alternative that was not analyzed is the potential for San Luis Obispo to connect to SWP and wheel SWP water to Golden State Water Company (GSWC), which could provide additional potential exchange opportunities between SWP, NWP, Salinas and Whale Rock agencies. Some other potential opportunities that were brainstormed during this

process included potential use of the SWP Management Tools<sup>1</sup> for more flexibility to provide water, or potentially the opportunity to partner with other agencies in the County to share cost of SWP buy-in and contracting. Another opportunity that was additionally considered was a potential emergency intertie with the City of San Luis Obispo. For this alternative to be feasible, the City San Luis Obispo would need to change existing ordinances prohibiting the sale of potable water outside of the City limits and alter its place of use within water rights permits for its surface water supplies. GSWC, the District and San Luis Obispo intend to continue exploring potential opportunities.

**Los Osos** – The highest ranking Resiliency Risk Mitigation Opportunity identified for Los Osos included constructing an interconnection with the City of Morro Bay. The interconnection would allow for the delivery of municipal blend water from Morro Bay’s distribution system to Los Osos. An alternative that was not analyzed is the potential for water to be transferred from Los Osos to Morro Bay in the event of an infrastructure failure for SWP or Chorro Valley pipelines or to enhance conjunctive use opportunities. The Los Osos water purveyors intend to further investigate this and other potential opportunities in conjunction with the additional programs identified in the Los Osos Basin Plan to improve water supply sustainability.

**Chorro Valley** – The highest ranking Resiliency Risk Mitigation Opportunity identified for the Chorro Valley included construction of a Salinas/NWP intertie. An extension of the NWP pipeline to an old Salinas pipeline to Chorro Valley Reservoir and WTP at the California Men’s Colony could provide multiple opportunities for additional water and in-lieu exchanges in the Chorro Valley, including the potential to purchase water from the NWP Sales Program<sup>2</sup>. The District intends to seek funding to inspect old Salinas line infrastructure, continue previous work the County started in 2014 to interconnect to Chorro, investigate a potential bypass option, and look further into capacity and treatment constraints.

In addition to the specific Resiliency Risk Mitigation Opportunities and related findings, the process of developing the RWIRP was determined to provide the additional regional water resource planning benefits described below:

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<sup>1</sup> For more information on the State Water Project Water Management Tools Study, visit:  
<https://www.slocounty.ca.gov/Departments/Public-Works/Current-Public-Works-Projects/State-Water-Project-Water-Management-Tools-Study.aspx>

<sup>2</sup> The Nacimiento Water Project Water Sales Program is being developed in coordination with the Nacimiento Project Commission: <https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Nacimiento-Project-Commission.aspx>

**Enhanced Relationships** – The workshop format of the RWIRP provided the opportunity for key staff from water agencies in the County to improve and enhance relationships through engaging in an open dialog, working together collaboratively, and developing a common understanding of water supply challenges and opportunities for their agency and/or their neighboring agencies.

**Systematic Evaluation** – The comprehensive and systematic evaluation of resiliency risk provided the District and the participating agencies with an improved understanding of potential water supply vulnerabilities, will aid in determining where to focus staff and budget resources, and provides justification for implementation of projects/initiatives to improve water supply resiliency in San Luis Obispo County moving forward.

### **What are the recommendations from the RWIRP?**

The District, CWAT and other relevant agencies should continue evaluation and collaboration to advance short-term initiatives to improve resiliency, such as the ongoing Countywide Emergency Planning priorities (Appendix D) and the RWIRP Resiliency Risk Mitigation Opportunities as well as long-term Initial Regional Water Resiliency Concepts (Appendix A) and Salinas Dam and Desalination CWAT priorities (Appendix B).

Based on the conclusions and identified benefits of the RWIRP, the following recommendations were developed for improving water supply resiliency in San Luis Obispo County.

**Dynamic Document** – The framework developed for assessing resiliency risk and evaluating mitigation opportunities should be updated as new information is made available on the supply availability, future demands, mitigation projects or other parameters. The completion of the 2020 Urban Water Management Plans (UWMPs) and subsequent monthly and annual reporting requirements will provide opportunities to update the supply/demand component of the Resiliency Risk Assessment. Other State data sources could be used as well, such as electronic annual report (eAR) data from the State Water Resources Control Board- Division of Drinking Water. Updating the Resiliency Risk Assessment with new supply/demand estimates will likely impact the resiliency rankings as the 2020 UWMP updates will be the first formal supply/demand evaluation for most agencies following the recent unprecedented drought from 2012 – 2017 that identified new vulnerabilities in agencies' water supply portfolios.

**Planning Integration** – The RWIRP and the Resiliency Risk Assessment findings should be integrated with other local and regional water supply resiliency initiatives. DWR recently completed a vulnerability analysis of small water suppliers and rural communities and recently published final recommendations for county-wide drought planning (<https://water.ca.gov/Programs/Water-Use-And-Efficiency/2018-Water-Conservation-Legislation/County-Drought-Planning>). The results of the DWR analysis are also provided in an interactive map format (<https://dwr.maps.arcgis.com/apps/MapSeries/index.html?appid=3353b370f7844f468ca16b8316fa3c7b>). The RWIRP could be updated with more focus on rural and small water agencies from the DWR analysis. As more formal requirements for resiliency planning are developed, the RWIRP can be updated or used as a functional equivalent for meeting future drought planning and resiliency evaluation regulations.



As described in Section 2.5, the RWIRP is intended to be a platform for a “living document” resource and tool that can be integrated with and/or inform the following:

- Master Water Report
- Integrated Regional Water Management (IRWM) Plan
- UWMPs and Forthcoming Monthly and Annual State Reporting
- Sustainable Groundwater Management Act (SGMA) compliance documents and initiatives
- Individual Agency Supply Initiatives
- Regional Agency Supply Initiatives (e.g., SWP Management Tools, NWP Sales Program, etc.)

**Enhanced Supply Risk Evaluation** – The Supply Source Risk Assessment that was completed for the RWIRP could be improved through incorporation of Decision Support Software that would allow for evaluation of multiple variables to determine system vulnerabilities and development of probabilistic or probability-based assessments of vulnerability for the different water supply sources to extended droughts, natural disasters and infrastructure failures. Additionally, water agencies are required to report on resiliency vulnerabilities and mitigations for their Resiliency Risk Assessments (RRA) and Emergency Response Plans (ERP) to meet America’s Water Infrastructure Act (AWIA) requirements.

**Regional Interconnections** – The RWIRP focused on evaluation of the vulnerabilities and interconnection mitigation opportunities to improve resiliency for the most vulnerable agencies and those without identified mitigation opportunities. The RWIRP and Countywide Emergency Planning CWAT priorities represent opportunities to get “quick wins” through lower effort interconnections and agreements from agency to agency and provide a launching pad for larger regional projects. There is significant potential to improve resiliency for other agencies through larger regional projects identified in the Initial Regional Water Resiliency Concepts (Appendix A) and Salinas Dam and Desalination CWAT priorities. These larger initiatives could allow the transfer of water between different supply sources (e.g. North County/South County Water Supply interconnection, Salinas/Lopez Reservoir interlake tunnel, etc.). Analysis of these additional opportunities should be included in future phases of the RWIRP and other District/CWAT initiatives (Appendix B).

Project Name	Parties Involved	Funding Status	Capital Cost	Status
<b>Program A</b>				
Water Systems Interconnection	LOCSD/GSWC	Fully Funded	LOCSD/GSWC \$103,550	Completed
Upper Aquifer Well (8 <sup>th</sup> Street)	LOCSD	Fully Funded	\$320,000	Well was drilled and cased in December 2016. Budget remaining \$320,000 to equip the well. Design is 100% complete and project has been included in an IRWM Grant Application. Construction is scheduled to move forward in summer of 2021
South Bay Well Nitrate Removal	LOCSD	Fully Funded	\$636,000	Completed
Palisades Well Modifications	LOCSD	Fully Funded		Completed
Blending Project (Skyline Well)	GSWC	Fully Funded	\$1.15 mil	Completed
Water Meters	S&T			Completed
<b>Program B</b>				
LOCSD Wells	LOCSD	Not Funded	BMP: \$2.7 mil	Project not initiated
GSWC Wells	GSWC	Not Funded	BMP: \$3.2 mil	Project not initiated
Community Nitrate Removal Facility	LOCSD/GSWC/S&T	GSWC Portion Funded	GSWC: \$1.23 mil	GSWC's Program A Blending Project can be considered a first phase of the Program B Community Nitrate Removal Facility.
<b>Program C</b>				
Expansion Well No. 1 (Los Olivos)	GSWC	Fully Funded	\$1.76 mil	Completed
Expansion Well No. 2	LOCSD is currently leading the project with potential GSWC and S&T involvement, depending on final location	LOCSD is currently leading the project with respect to funding	BMP: \$2.0 mil	Site selection is complete; the environmental work and submittal of the Minor Use Permit to the County will be completed in May 2021. Construction is anticipated to begin Q1 2022.
Expansion Well 3 and LOVR Water Main Upgrade	GSWC/LOCSD	Cooperative Funding	BMP: \$1.6 mil	This project has been deferred under Adaptive Management.
LOVR Water Main Upgrade	GSWC	May be deferred	BMP: \$1.53 mil	Project may not be required, depending on the pumping capacity of the drilled Program C wells. It may be deferred to Program D.
S&T/GSWC Interconnection	S&T/GSWC	Pending	BMP: \$30,000	In conceptual design

Project Name	Parties Involved	Funding Status	Capital Cost	Status
<b>Program M</b>				
New Zone D/E Lower Aquifer monitoring well in Cuesta by the Sea	All Parties	Funded through BMC Budget	\$115,000	Completed
<b>Program U</b>				
Creek Discharge Program	All Parties	\$50k included and approved in the CY 2019 BMC Budget	Anticipated cost of \$582,000 through feasibility phase	The 2019 budget includes funding for Soil Aquifer Treatment evaluation in the amount of \$50,000. BMC authorized completion of the Soil Aquifer Testing to support implementation of the program. These activities are currently on hold pending outcome of the CY2020 BMC budget discussions.