NAPA COUNTY BOARD OF SUPERVISORS
Board Agenda Letter

TO:         Board of Supervisors
FROM:       Don Ridenhour - Director
            Public Works
REPORT BY:  Richard Thomasser, Watershed and Flood Control Operations Manager - (707)259-8657
SUBJECT:    Approval of Amendment No.13 to Napa County Measure A Funding Agreement No. A-4202 with Napa County Flood Protection and Watershed Improvement Authority

RECOMMENDATION
Director of Public Works requests approval of and authorization for the Chair to sign Amendment No.13 to Agreement No. 4202 with the Napa County Flood Protection and Watershed Improvement Authority increasing the total amount of Measure “A” funds by $4,860,000 for FY 2010-2011 scope additions to existing unincorporated projects, and adding two new projects; Lake Berryessa Watershed Improvements and Sulphur Creek Sediment Reduction Projects, for a new maximum of $13,962,000, and extending the term through June 30, 2011 for all Napa County Measure “A” projects.

EXECUTIVE SUMMARY
Measure A has been used to fund ten projects in the County unincorporated area, eight of which are still active projects. Four of the eight active projects pertain to flood damage reduction and/or restoration of the river and tributaries, and four pertain to improving water supply reliability and watershed protection. At the May 25, 2010 regular Board meeting, staff reported on the status of the eight active projects and received feedback and approval from the Board regarding recommended additional activities on these projects in FY 2011 and the use of Measure A funds for the following new projects:

1. Watershed improvement projects for the Lake Berryessa area
2. Sediment reduction activities in the Sulphur Creek Watershed, meeting Napa River Sediment TMDL implementation goals

Staff has prepared Amendment No. 13 of the County-Flood Authority Measure A Funding Agreement to appropriate additional funding for FY 2011 consistent with Board direction.
**FISCAL IMPACT**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
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<tbody>
<tr>
<td>Is there a Fiscal Impact?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is it currently budgeted?</td>
<td>Yes</td>
</tr>
<tr>
<td>Where is it budgeted?</td>
<td>Capital Improvement Program</td>
</tr>
<tr>
<td>Is it Mandatory or Discretionary?</td>
<td>Discretionary</td>
</tr>
<tr>
<td>Discretionary Justification:</td>
<td>The activities being funded are the type of projects authorized within the County unincorporated area for the use of Measure &quot;A&quot; funds.</td>
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<tr>
<td>Is the general fund affected?</td>
<td>No</td>
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<tr>
<td>Future fiscal impact:</td>
<td>None</td>
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<tr>
<td>Consequences if not approved:</td>
<td>Additional activities on existing projects and two new projects for the County unincorporated area would not be performed during FY 2011.</td>
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<tr>
<td>Additional Information:</td>
<td>The additional funding for County unincorporated Measure &quot;A&quot; projects was addressed in the supplement to the FY 2010-2011 budget during budget hearings on June 21, 2010.</td>
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**ENVIRONMENTAL IMPACT**

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

**BACKGROUND AND DISCUSSION**

**Measure A Background**

In March 1998, voters approved a half cent sales tax increase for flood control purposes known as Measure "A". The County and each City and Town are entitled to the proceeds from Measure "A" generated within their political boundaries for projects that were specified in the ballot measure. For the County, the measure reads:

**Unincorporated Areas of Napa County:**

1. County unincorporated area flood damage reduction projects including elevating/relocating structures, including bridges, in the floodway and floodplain; and
2. Agricultural watershed and stormwater runoff management improvements planned jointly by the agricultural industry, the County, the Napa County Resource Conservation District and the Department of Fish and Game, including projects which will:
   a. Reduce the amount of storm runoff and sediment in the Napa River System from agricultural lands; and 
   b. Increase flood storage of the River system by the setback of active land uses from river and tributary banks.
Community of Angwin/Deer Park:

1. Stabilization and enhancement of existing water reservoirs which shall be for the purpose of flood protection and water reliability; and
2. Stabilize water quality.

Evaluation of Types of Projects and Benefits

Measure "A" does not identify specific projects for the County unincorporated area (including the Angwin/Deer Park and Berryessa sub areas), but rather specifies that projects must meet certain objectives. In January 2008, Staff presented and received approval from the Board on the Measure "A" Project Benefits and Priorities Matrix, which outlines the types of projects and benefits that meet the Measure "A" objectives. The matrix also provides a relative priority ranking of projects based upon the ability of projects to cost effectively meet the Measure "A" objectives, while also considering the overall benefit to the public by applying the following criteria, as follows in order of relative importance:

1. Projects which provide protection for health and safety;
2. Projects which provide protection against possible future damage to property and/or the environment or protects natural resources; and
3. Projects which enhance the environment

The above proposed criteria are consistent with the intent of the Measure and also with previous direction from the Board. The proposed evaluation of projects should also consider the ability of Measure "A" funds to leverage other sources of funding for projects which meet the Measure "A" objectives. In this regard, project opportunities that come forward with supplemental funding from grants or from benefiting property owners, which only need to be matched with Measure "A", support a previously stated Board objective of stretching the Measure "A" dollars. Similarly, if other sources of funds are readily available for certain project types, this may factor into the relative importance of using Measure "A" funds for a particular activity.

Measure "A" Funding Agreement

In August 1999, a Funding Agreement was entered into between the County and the Napa County Flood Protection and Watershed Improvement Authority (NCFPWIA), which is the mechanism for the County to receive Measure A funding to conduct projects as specified in the Measure A Ordinance. The Funding Agreement is amended to provide funding as needed to conduct projects on an annual basis, or if necessary, as projects are identified. The County Funding Agreement was last amended on September 15, 2009. As of this 12th amendment, the NCFPWIA had authorized a total of $9,102,000 towards ten approved Measure A projects in the County unincorporated area. Through the end of the third quarter of Fiscal Year (FY) 2010 (3/31/10), the total expenditures on these projects totaled approximately $4,939,581 as summarized in the following table:

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Authorized Funding</th>
<th>Expenditures through 3/31/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer Park Rd and Silverado Trail Road Elevation Feasibility*</td>
<td>$179,000</td>
<td>$179,000</td>
</tr>
<tr>
<td>Lewelling Avenue Drainage Outfall*</td>
<td>$798,000</td>
<td>$798,000</td>
</tr>
</tbody>
</table>
On May 25, 2010, staff provided an update on the status of the existing projects being funded by Measure "A" and received direction for two additional projects. Staff is now requesting approval of Amendment No. 13 to the funding agreement with the NCFPWIA to continue funding of the previously authorized projects and add two new projects during FY 2011 consistent with Board direction received on May 25, 2010. Each of the projects meet the objectives of Measure "A" and are consistent with the types of projects in the approved project evaluation matrix.

### Status of Previously-authorized Active Projects and Additional FY 2011 Budget Allocations

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Authorized</th>
<th>Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milliken-Sarco-Tulocay Recycled Water Plan</td>
<td>$929,000</td>
<td>$748,259</td>
</tr>
<tr>
<td>Angwin/Deer Park Water Supply Reliability Plan</td>
<td>$1,729,000</td>
<td>$971,988</td>
</tr>
<tr>
<td>Napa River – Rutherford Reach Restoration</td>
<td>$4,167,000</td>
<td>$1,769,620</td>
</tr>
<tr>
<td>Napa River – Oakville Cross Road to Oak Knoll Reach</td>
<td>$240,000</td>
<td>$177,200</td>
</tr>
<tr>
<td>Flood Studies in the Unincorporated Area</td>
<td>$300,000</td>
<td>$154,963</td>
</tr>
<tr>
<td>Zinfandel Lane Bridge Fish Passage</td>
<td>$315,000</td>
<td>$101,966</td>
</tr>
<tr>
<td>County-wide Water Conservation Program</td>
<td>$420,000</td>
<td>$38,585</td>
</tr>
<tr>
<td>Coordination of Napa River Restoration Projects</td>
<td>$25,000</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Authorized Funding to Date</strong></td>
<td><strong>$9,102,000</strong></td>
<td><strong>$4,939,581</strong></td>
</tr>
</tbody>
</table>

* Project Complete

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### MST Recycled Water Plan

The MST recycled water project is an effort to provide an alternative source of water to the MST area to offset local groundwater use and restore the groundwater basin, which should also improve the health of the local streams and ultimately, the Napa River. The County has been working with the Napa Sanitation District (NSD) for the past several years to provide preliminary engineering, environmental review and assessment district engineering services so that MST area residents can decide if they are willing to fund the infrastructure improvements required to improve the local water supply shortage.

To date, the following has been accomplished: County staff has worked with NSD staff to determine an initial assessment district boundary and recycled water distribution system layout. NSD had a consultant complete a hydraulic analysis of the system (May 22, 2007) to estimate recycled water demands and verify that they have enough recycled water to meet the needs of the project. As part of this hydraulic analysis, cost estimates were developed for four different water usage scenarios. The County’s assessment district engineering consultant, Kristin Lowell, Inc. developed an initial benefit assessment methodology and initial assessments per parcel. In December 2007, the County Board of Supervisors voted to support the Napa Sanitation District’s efforts in the North Bay Water Reuse Authority Program (NBWRA - a large regional recycled water project involving Marin and Sonoma Counties). Participation in the NBWRA has enabled the County/NSD to participate in the environmental document preparation for the overall regional project, which includes a project level review of the MST recycled water project (one of the regional components). The environmental impact report/environmental impact statement (EIR/EIS) was approved by the County and NSD in December 2009. Also in December 2009, the County Board of
Supervisors approved continued participation in NBWRA in an effort to secure federal funding assistance, and approved an agreement with NSD reserving up to 1,000 AF per year of recycled water for the area.

Public outreach efforts continue at varying levels with community members, including the Napa Valley Country Club and “Groundwater Under Local Protection,” also known as GULP. Based on community feedback, the County has developed a revised proposal to address the groundwater problem in MST, including a smaller-scale recycled water project, development of a water conservation program for the area, investigation of potable water supply options, and review of existing ordinances and land-use policies in the area. The County has been working with NSD and their engineering consultant to evaluate this smaller recycled water project to serve the Napa Valley Country Club and interested vineyards – this work is now complete, and staff is working with the interested parties to develop funding alternatives.

In addition, an MST Ad Hoc Committee composed of two elected officials from the County, the City of Napa and NSD has recently been formed and has been meeting regularly. This group is exploring additional alternatives to address the water supply shortage in the MST area, including potable water, water conservation and regulatory opportunities.

The project expenditures are approaching the authorized funding total, and additional funds will be sought for County staff time, continued participation in NBWRA in FY 2011, exploring additional water supply alternatives and related activities, and possibly to begin project design activities. Amendment No. 13 provides an additional $270,000 in budgetary funding for FY 2011 for on-going NBWRA participation with NSD (County share of annual NBWRA budget), staff time and limited consultant work. As the recycled water project moves forward and local and federal funding issues become clearer, staff may also request funding to begin detailed project design. There are several issues to be worked out before a decision on funding all or a portion of design activities could be made.

Angwin Water Supply

The County had initially been working with area water purveyors to develop a prioritized list of projects that will improve water supply reliability to most, if not all, water users in Angwin/Deer Park. A “test case” project with Howell Mountain Mutual Water Company (HMMWC) was developed beginning in late 2006 to determine the procedures for completing projects with County Measure A reimbursement. This effort included researching the legal mechanisms to provide public Measure A funding to private mutual water companies, and the development and execution of a Memorandum of Understanding between the County and HMMWC (May 2007). Work on this “test case” project (Lake Henne Intake Pipeline and Orville Pump Station) was completed in September 2008, and final payment for the work was made by the County in October 2008.

After this “test case” project was completed, County staff began working with both HMMWC and St. Helena Hospital to implement significant projects for each entity based on some master planning that each entity performed as part of their efforts to obtain Community Development Block Grant funding. These two high priority projects were: HMMWC’s Deer Park Supply Pipeline improvements and St. Helena Hospital’s Horizontal Well, Manifold and Transmission Line improvements. MOU’s were initially entered into with HMMWC and St. Helena Hospital to provide funding for the design phases of each project, both of which were completed by the end of June 2009. Better cost estimates were developed during the design phase of these projects and new MOU’s were developed for project construction. HMMWC awarded their construction contract in the spring of 2009 and construction was completed in the summer of 2009. In addition, HMMWC completed emergency waterline replacement work similar in nature for which they have requested a separate MOU to receive funding for that emergency work. St. Helena hospital is planning to bid their project in 2010.

County staff has held several meetings with the various water companies and community groups in an effort to gain consensus on an equitable method to provide funds to the individual water purveyors. At this time, consensus has been reached and all the water purveyors in the area are supportive of a proposed funding sub-allocation
methodology based on the number of service connections. County staff is developing a Memorandum of Agreement to formalize the funding sub-allocations. It is hoped that the County and individual water purveyors can complete this effort early in Fiscal Year 2010-2011 so that each water purveyor can begin to plan Measure A eligible projects. In addition, staff has been working with two of the smaller mutual water companies (Linda Falls Terrace and Rancho La Jota) that are interested in beginning construction projects sometime in 2010.

County staff will continue to work with the Angwin/Deer Park water purveyors to prioritize and fund additional projects as Measure “A” funds are available. Once the MOA is completed, it is anticipated that new projects will be developed. HMMWC has already expressed a desire to begin additional projects and Rancho La Jota has been working on Measure A eligible activities but is seeking a new reimbursement methodology that staff is reviewing, and which would require the MOA to be formalized. Amendment No. 13 provides an additional $500,000 in budgetary funding for FY 2011 for Measure A eligible projects that are yet to be developed, but for which the Board of Supervisors would need to approve through the project MOU process. This will streamline the process so that staff does not need to prepare a new County-Flood Authority Measure A Funding Agreement Amendment multiple times during the year as individual Angwin/Deer Park water purveyors develop their projects.

Napa River Rutherford Reach Restoration

The Board of Supervisors approved funding the Rutherford Reach project (aka Rutherford Dust Project) in 2004. This project is a public-private partnership where 22 riverfront landowners have entered into agreements with the County for restoration in the riparian areas of their property. In the case of agricultural parcels, which is the principle land use in this reach of the river, landowners involved in the project are volunteering to setback their existing agricultural uses to increase the riparian areas along the river. The project will setback agricultural berms, stabilize eroding riverbanks, construct bench cuts in some areas and construct in-stream habitat enhancements. These improvements will benefit the riverine environment and reduce flood damage potential throughout the reach. The project preliminary design was completed in 2008, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared and circulated for public comment, and project permits have been obtained with resource agencies. The entire project encompasses 9 linear areas (aka “reaches”) of the river spanning 4.5 miles from Zinfandel Lane to Oakville Cross Road. The County has retained consultants to prepare construction drawings for the first three phases of construction. Construction began in summer 2009 on the east bank of Reaches 1 and 2 (Phase 1A). In 2010, designs have been finalized for the west bank of Reaches 1 and 2 (Phase 1B) as well as both banks of Reach 3 (Phase 2). The design and construction of Reaches 1 through 3 have been funded partially by grants from the State and Federal ARRA funds. The final design of Reach 4 is also underway and should be ready for construction in summer 2011.

Landowners have formed a Landowner Advisory Committee (LAC) to work with the County and the Flood Control District on Project maintenance. The Flood District created a Special Benefit Assessment District to provide for maintenance activities throughout the Rutherford Reach funded by the landowners in 2008.

Landowners grant efforts have secured sufficient funds matched by Measure A funds to cover the estimated costs of Phase 1 of construction to be completed in summer 2010. The west bank portion of this work is currently being advertised for competitive bids. A separate grant is funding Phase 2 construction in Reach 3 and this work is also out for bid. The construction contracts will be brought to the Board for approval and any necessary additional budgetary authorization pending the outcome of the bid process. A grant application is pending approval from the State Habitat Conservation Fund to partially fund Reach 4 construction. Amendment No. 13 provides additional funding for FY 2011 of $2,050,000, which will be used to complete construction and revegetation through Reach 3, match pending grants for a portion of Reach 4 construction, fund final design of a critical erosion repair in Reach 7 and continued landowner liaison activities through the next year.

Napa River Oakville to Oak Knoll Reach Restoration
The Oakville Reach project is modeled after the Rutherford Reach project and aims to restore the 10 miles downstream of Oakville Cross Road. Currently, the project conceptual design is nearly complete. The California Land Stewardship Institute (CLSI) obtained a $500,000 grant from the State for the conceptual design. The Board has approved $215,000 of Measure A funds as a match for the grant. An additional $25,000 was been budgeted for county staffing and oversight of this contract and to support the project moving forward once the conceptual design is complete in September 2010.

On May 25, 2010, Staff outlined the next steps on this project to be conducted during the upcoming year, including the formal environmental review required under CEQA and landowner outreach activities to secure agreements to move forward with the detailed design of the project. An additional $250,000 in budgetary funding is included for these activities in Amendment No. 13 for FY 2011.

Flood Studies in the Unincorporated Area

The storm of December 31, 2005 and other prior storms have highlighted several flooding and/or drainage related problems that impact County residents and property. To date, $300,000 has been approved by the Board to conduct multiple special flood studies throughout the unincorporated area. Initially this funding was used as a resource for staff to identify and begin evaluation of multiple problems reported by property owners. Flooding problems range from localized drainage concerns to larger scale issues associated with identified floodplain areas. As a result, the potential solutions to the problems also vary. The studies have generally been conducted according to a prioritization approach (e.g., number of properties/structures affected) that began based on the flood problems that resulted from the December 31, 2005 storm.

Four specific projects have been supported by the authorized funds to date as summarized below:

**Milliken Creek Hydraulic and Restoration Studies**

The County participated in funding a study of the hydrology, geomorphology and restoration opportunities for Milliken Creek between Westgate Drive and Atlas Peak Road. This reach of the creek traverses the residential communities in the Silverado Country Club area which were severely impacted by flooding and flood damages as a result of the December 31, 2005 storm. The study was conducted by Silverado Property owners Association (SPOA) with funding support by the County and the Silverado Country Club. Each entity paid $25,000 toward the $75,000 total cost of the study. The hydrologic study evaluated the previous study performed by FEMA as part of the National Flood Insurance Program, which is the basis of the current effective Flood Insurance Rate Map (FIRM) for the area. The December 31, 2005 storm produced more extensive flooding than the FEMA study predicted. The FEMA study used a particular frequency and duration of storm that was deemed to be statistically valid in making its determinations on flooding risk. However in review of this approach it was determined that a very intense storm of short duration such as was experienced in December 2005, would result in more significant flooding in the Milliken watershed. The results of this study were reviewed by FEMA and they are in the process of updating the FIRM.

The restoration opportunities study identified significant degradation in the creek due to the presence of nonnative invasive plants and also heavy handed approaches in dealing with bank erosion, such as significant use of rip rap. While such measures are sought by homeowners to prevent loss of stream bank, they often translate into problems for downstream neighbors. The study concluded that opportunities for properly designed biotechnical bank repairs exist and the replacement of nonnative, invasive vegetation with native species would also enhance the habitat value of the stream. A stewardship approach is being pursued by the various homeowners associations and the country club in coordination with the Flood Control District to address restoration of the creek.

During the current FY 2010, the County retained a local consultant to review the recommendations of the 2007 flood study and perform additional analyses and cost benefit evaluations on how to mitigate flooding concerns in the area. This work is ongoing. In the coming fiscal year staff plans to continue to evaluate the FEMA flood map in
the area downstream of the Silverado reach of the creek to the Napa River, which also experienced significant flooding in 2005/2006.

**Sunnyside and Deer Park Flood Study**

Due to localized flooding in the area of Deer Park Road and Sunnyside Drive that impacts both County roads and private properties in this area, the County retained an engineer to conduct a flood study to evaluate possible solutions. The study focused on the unnamed tributary to Canon Creek along Deer Park Road extending about 3,500 feet upstream of the intersection of Sunnyside Drive. In this area there are 6 culverted locations to allow crossing of the creek. Three of these culverted locations are owned and maintained by the County and the rest are privately owned. The study was needed to evaluate if there would be a benefit to upsize the culverts owned by the County at Deer Park Road and at Sunnyside Drive, possibly to reduce the amount of roadway flooding and also to reduce flooding on private property. The study showed that the stream leaves its banks in several locations in larger storms. At the first (upstream) County culvert at Deer Park Road, the culvert size cannot pass the 100-year discharge without roadway flooding. However, the study showed that if the Deer Park Road culvert were to be upsized to allow passage of the 100-year discharge, it would have a negative impact on downstream properties, particularly along Lilac Lane where private culverts exist that are also significantly undersized. Therefore the Deer Park culvert should **not** be upsized without the private culverts being upsized. At the downstream Sunnyside Drive culvert, the study showed that upsizing the culvert would not provide significant improvement in the extent of private property flooding immediately upstream because the size of the channel is limited and has been encroached upon by property owner actions over time. Staff sent a letter presenting the results of the study to the affected property owners and offering guidance for property owners regarding private culvert improvements and/or channel improvements.

**House Elevations in Flood Prone Areas**

Many of the homes in the unincorporated area that flood when larger storms occur are a result of the fact that the structures are within identified special flood hazard areas (FEMA mapped flood zones). Generally the best approach to address this type of structural flooding is to elevate the structure such that the finished floor is above the 100-year (base flood) water surface elevation. For all new construction, or where substantial improvement of a structure is planned, County code requires that finished floors be constructed a minimum of 1-foot above the base flood elevation.

Grant programs are available to help homeowners with the cost of elevating existing homes. In 2006, in support of development of a grant proposal, County staff conducted outreach to homeowners that had reported flooding and also surveyed several structures to determine accurate floor surface elevations. The focus of this grant program was on homes within the unincorporated area that were identified by FEMA as having been flooded multiple times. After conducting FEMA-required cost benefit analyses, there were 8 structures where the benefits of elevation outweighed the cost of the project. The County applied for a grant to elevate these 8 houses. The total grant request was $1.1 Million; however, FEMA only obligated $375,000 to the Flood Control District for this grant. Environmental clearance has been completed by FEMA for all 8 structures. Although this level of funding is not sufficient to cover the costs to elevate all eight structures, only one homeowner is currently working with the Flood District towards a home elevation project.

**St Helena Area Flood Damage Reduction and Restoration Opportunities**

County residents along the eastern bank of the Napa River in the reach adjacent to the proposed St Helena Flood Protection Project have expressed concerns regarding the potential effect of this project on their properties. The City of St. Helena has conducted studies that demonstrate no negative impacts will result from their proposed project as compared to the existing condition. However, the project does not offer improved flood protection for the residents in the County unincorporated area. During large storms, the river floods a large area on the eastern bank, which is included in the floodway. Failure of the agricultural levee on the Napa Reserve property is common, leading to erosion and debris-related damages to the adjacent vineyard. Floodwaters cross Silverado Trail in two locations often scouring the shoulder on both sides of the roadbed and causing erosion in locations due to fast
moving waters. Streambank erosion where the river leaves and reenters the channel is common. A prior feasibility study to evaluate roadway elevations was conducted; however this option was deemed financially infeasible. In addition, recent reductions in the scope of the St Helena project would make a roadway elevation project technically infeasible because of floodway restrictions.

Residents have formed a stewardship group and would like to work with the County on possible solutions to reduce flood damage and improve safety in this area during floods. Staff surveyed the finished floor elevations of several homes to evaluate flood risk.

Amendment No. 13 includes an additional $100,000 of budgetary funding to continue efforts on the above projects and potential additional flood mitigation projects during FY 2011.

**Zinfandel Lane Bridge Scour Protection and Fish Passage Design**

The Napa County Resource Conservation District (RCD) completed a geotechnical study using grant funds from the Corps of Engineers to address erosion in the Napa River channel at the Zinfandel Lane bridge. The river bed at this location has been severely downcut immediately downstream of the bridge, which was constructed in 1913. Efforts over the years to address downcutting and protect the bridge piers included placement of concrete on the channel bottom. However, a 7.5 foot drop in the channel bottom has scoured out immediately downstream and underseepage of the concrete is occurring. This situation represents both a current barrier to fish passage and also a longer term concern for stability of the bridge. The study included a recommended conceptual design to protect the bridge and provide for fish passage. The current cost estimate for construction and post construction monitoring activities is approximately $1.5 million.

During FY 2010, a grant application was submitted to the National Oceanic Atmospheric Administration (NOAA), Open Rivers Initiative Grant Program, which would have funded 50% of the project implementation. Although this grant was not awarded, the FY 2011 budgetary forecast and Amendment No. 13 includes $835,000 of Measure A funds to match grant(s) that will be pursued and possibly awarded during the upcoming fiscal year. The project is currently in environmental review under CEQA and final design is nearing completion. Project permits should be secured by fall 2010, enabling construction to begin as soon as that timeframe. However, due to regulatory requirements for in-water work, it is more likely that construction would occur in summer 2011.

**County-wide Water Conservation Program**

For many years Napa County has been committed to the conservation of sensitive resources, has been at the forefront of protecting agricultural land, and has encouraged the conservation of natural resources including surface and ground water, soils, fisheries, wildlife, important plant species, and habitats. The County had never developed a formal water conservation program for the unincorporated areas, even though groundwater and privately developed surface water impoundments provide the water supply for the majority of Napa County’s rural residential and agricultural water users.

In April 2009, the Board of Supervisors requested that County staff develop a multi-year voluntary water conservation program for their consideration. Initially, staff was asked to look into the viability of a water conservation program for the MST area of the County, which is experiencing declining groundwater conditions, but because countywide sales generate the revenues for Measure A funding, and because the funds proposed for use to fund the proposed water conservation program will come from the unincorporated area of Napa County allocation, it makes sense to have a water conservation program that all County unincorporated area residents can benefit from. Staff reviewed standard water conservation industry practices, the programs of local cities and neighboring areas, and also consulted with the agricultural community, Napa Resource Conservation District and the California Department of Fish and Game in formulating a water conservation program for the County unincorporated area.
The water conservation program was formally approved in the fall of 2009. Initial accomplishments include the distribution of water conservation devices, which are available to all County unincorporated area residents, both at the Flood Control District office and various community events. Water conservation signage has been developed for the MST area of the County. Staff organized an agricultural water efficiency workshop which was held on March 9, 2010 and had over 100 attendees. The first water conservation newsletter was put together for distribution at Earth Day festivities and for mailing to the MST and Carneros areas in early May. In addition, a County water conservation web-page has been established.

County staff will continue with development of the various program elements for the remainder of the fiscal year and into the next fiscal year. Three years of funding were authorized when the County Unincorporated Area Water Conservation Program was approved. The funding amounts authorized are adequate to support the ongoing and planned activities and no additional funding is being requested for FY 2011.

**Coordination of Napa River Restoration Projects**

The Board approved a budgetary level of funding during FY 2010 for staff to seek support for overall coordination of the ongoing large-scale restoration efforts on the Napa River. Staff completed a Request for Proposals (RFP) process and selected the Napa County RCD and New Level Group team. The RCD-New Level Group team will work to increase inter-project collaboration for both landowners and technical project teams. The Board approved a professional services agreement with RCD on April 27, 2010 for the remainder of the current fiscal year. Work has just begun; however, projections for the coming fiscal year indicate budgetary costs of approximately $45,000 for FY 2011. This amount is included in Amendment No. 13.

**New Projects in FY 2011**

Staff reviewed the following additional projects with the Board on May 25, 2010 and received approval for the use of Measure "A" funds:

**Lake Berryessa Watershed Improvement Projects**

As part of Measure A, a portion of the funding was dedicated to the Lake Berryessa/Putah Creek watershed area. Through FY 2009, just under $1 million has accrued for use in the Lake Berryessa area, but to date none of this money has been allocated or spent. Specific projects were not originally identified in the original Measure A language, and clearly, any projects in this portion of the County will not provide flood control benefits to the Napa River. Therefore, County staff will rely on the priorities set forth on January 13, 2009 by the Board for evaluating potential new Measure A funded projects in the Lake Berryessa area.

For the near-term, there are two specific activities for which other funding sources are not readily available and that staff believes are appropriate for the use of Measure A funding using the criteria approved by the Board. These proposed activities are directly related to improving and protecting water quality in Lake Berryessa and the Putah Creek watershed. Such projects are considered to be “high priority” according to the attached Measure A Project Benefits and Priorities for Napa County Unincorporated Area Matrix (dated 1/13/08).

A watershed sanitary survey is required by the California Department of Public Health to be prepared by water purveyors that use certain source waters. In 2011, a watershed sanitary survey will need to be updated for Lake Berryessa, which is used as a water supply source primarily by Solano County agencies, but also by the Lake Berryessa Resort Improvement District and the Napa Berryessa Resort Improvement District, as well as other smaller water systems located adjacent to the Lake. Staff will be proposing to utilize $50,000 to either prepare a simple Lake Berryessa Watershed Sanitary Survey for use by the small water systems around the Lake or to contribute the County’s proportionate share to fund a larger effort that might be lead by Solano County Water
Another important water quality related activity that staff will ask the Board to consider is the evaluation of the wastewater treatment and disposal practices of the two Resort Improvement Districts and other small wastewater generators around the Lake in relation to current Regional Water Quality Control Board permit requirements. Treated wastewater overflow and/or controlled discharge events have occurred at both Districts in the past few years due in large part to excessive inflow and infiltration of storm water and shallow groundwater into the collection system and staff would like to hire a consultant(s) to evaluate several alternatives related to reducing the amount of storm water entering the collection system and/or the long-term disposal requirements of these waters. With Pensus Group recently contracting with the Bureau of Reclamation (BOR) to develop and operate several resort areas around the Lake, there may be opportunities to partner with Pensus and the BOR to conduct these wastewater collection and disposal evaluation activities. The extent of these activities is unknown at this time, but there are firms that specialize in working with the Regional Water Quality Control Board to address regulatory compliance issues that could provide assistance. Outside legal counsel would likely be required as well.

In addition to the above projects, there may be other Measure A eligible activities in the Berryessa area, such as the Irrigated Lands Waiver Program and the proposed Mercury TMDL, and installation of stream and rainfall gages expanding the Countywide Alert system into this portion of the County. Staff discussed these opportunities on May 25, 2010 and received Board concurrence for budgetary funding.

Because the specific work scope of evaluating the wastewater collection and disposal alternatives is unknown at this time, nor have specific projects related to other miscellaneous water quality and watershed improvement related activities been identified or scoped, staff has included a budgetary level of funding of $600,000 in Amendment No. 13 for projects benefiting the Lake Berryessa area during FY 2011. Specific contracts that are consistent with the Measure A language will be brought to the Board for approval as they are developed.

**Sulphur Creek Watershed Sediment Reduction Project**

The Napa County Resource Conservation District (RCD), in partnership with Pacific Watershed Associates (PWA) and private landowners, has embarked on implementing a large-scale sediment reduction and storm water runoff management project in the Carneros Creek, Sulphur Creek and Heath Canyon Creek watersheds in the unincorporated area of Napa County. In its entirety, the project will protect water quality in the Napa River watershed by improving and otherwise upgrading priority rural road erosion sites which are contributing fine sediment to the Napa River and by preventing excessive fine sediment from entering Carneros Creek from a series of failed earthen dams on a tributary to Carneros Creek. All of the appropriate permits are in place and the project will be implemented in three phases, the first of which was completed in 2009 in the Carneros Creek watershed. The second and third phases, in the Sulphur Creek and Heath Canyon Creek watersheds, will be implemented in 2010 and 2011, respectively. Funding for project implementation is coming from a number of sources but it has been determined that insufficient funds are available to implement the project in its entirety without additional financial resources. Specifically, additional funds in the amount of $200,000 are needed to support implementation of the project in the Sulphur Creek watershed. This $200,000 will match over $700,000 already secured from the State Water Resources Control Board, the Department of Fish and Game, EPA, Scannell Properties, and participating property owners for implementation in all three watersheds. In addition these funds will match significant financial contributions, in excess of $300,000, from the California Department of Conservation Watershed Coordinator Program and the Bay-Delta authority that supported the landowner coordination, watershed assessment, and watershed management planning tasks that made this large-scale water quality protection project possible.

Without funding from Measure A, the work in the Sulphur Creek watershed will have to be significantly reduced and an opportunity to implement projects that will significantly reduce the amount of fine sediment entering the Napa River from a major tributary will be lost. Detailed “road-logs” for each of the sites in the Sulphur Creek watershed are complete and it is estimated that the treatments will prevent over 6,000 cubic yards of sediment from entering Sulphur Creek. The project, as designed, will treat 9.5 miles of rural road, upgrade 31 stream crossings, replace
and/or install 14 culverts, treat 1 landslide, and install 75 rolling dips and 14 critical dips. The work to be
implemented is consistent with the proposed sediment TMDL for the Napa River and the sites can and will be
used for demonstrations and workshops. The project is consistent with the types of projects that were specified in
Measure A for the County unincorporated area. Specifically, this project is an “agricultural watershed and storm
water runoff management improvement project,” planned by the RCD in collaboration with agricultural interests,
Napa County and the California Department of Fish and Game, that will “reduce the amount of storm water runoff
and sediment in the Napa River system from agricultural lands.” This type of water quality protection project is
considered a “high priority” according to the Measure A Project Benefits and Priorities for Napa County
Unincorporated Area Matrix (dated 1/13/08). Staff has included $200,000 to subgrant to RCD and $10,000 for staff
labor and oversight in Amendment No 13 of the Funding Agreement.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve
Reviewed By: Helene Franchi