CHAPTER 5
Project Selection Process and Procedure

The purpose of this chapter is to describe the process by which potential projects were developed and prioritized through the following five sections:

- Project Review Process
- Impact and Benefits
- Project Integration
- Relation to Local Water Planning
- Relation to Local Land Use Planning

5.1 PROJECT REVIEW PROCESS

The project review process included procedures for submitting projects, reviewing projects, and communicating the list of selected projects, as described below. The project lists included in Appendices G, H, and I are a preliminary inventory of projects and proposed projects in the NSV area, some of which are more highly developed than others. The project lists will be modified periodically by the NSV Board at open public meetings as projects may be added, dropped, integrated, or improved by their sponsors as they progress through permitting and local approval processes. NSV Board modification of the project lists does not require ranking of projects or re-adoption of the IRWMP.

5.1.1 Procedures for Submitting a Project to the IRWMP

The procedures that the RWMG used to solicit projects under this IRWMP and the procedures that will be used to add projects in the future are discussed below.

5.1.1.1 2012/2013 Project Solicitation Procedure

On May 7, 2012, the NSV Board formed a Project Review Subcommittee (PR Subcommittee) to create an online submissions process to solicit project and program proposals for possible incorporation into the NSV IRWMP. This PR Subcommittee was also tasked with developing review criteria and reviewing project and program submissions, prior to TAC and NSV Board consideration. The original PR Subcommittee consisted of then-NSV Board Chair Leigh McDaniel, NSV Board Vice Chair Stan Wangberg, NSV Board member Ryan Sale, and the six county representatives to the TAC (TAC Chair Vickie Newlin - Butte, TAC Vice Chair Lester Messina - Glenn, Gary Antone - Tehama, Eric Wedemeyer - Shasta, Mary Fahey - Colusa, and Dan Peterson - Sutter). Some staff changes have occurred since the founding of the PR Subcommittee (Lester Messina was replaced by Lisa Hunter in late 2013).

The PR Subcommittee met on May 10, 2012 and May 16, 2012 to develop the proposal submittal form and process, including instructions for the online proposal submittal form. It was decided at this time that although online submissions would be encouraged, paper submittal forms could also be made available.

The PR Subcommittee also developed a New Proposal Submittal Agreement and Terms of Use (Agreements, see Appendix J) for the proposal submittal process. Proposal proponents were required to sign the Agreement prior to completing the proposal submittal form. Agreement with the Terms of Use was required by anyone wishing to submit a proposal or access the published information related to submitted proposals. The Terms of Use is a basic disclaimer and limitation of liability form, while the New Proposal Submittal Agreement more specifically addresses expectations and understandings that organizations should have before submitting a project or program for possible inclusion in the IRWMP. For example, the New Proposal Submittal Agreement states that the proposal proponent has reviewed the NSV IRWMP's Goals and Objectives and has determined that the submitted proposal will meet one or more of the NSV IRWMP's Goals and Objectives and, furthermore, that the organization will provide a letter of support for the NSV IRWMP. At the same time, the New Proposal Submittal Agreement states that the proposal proponent may continue their independent planning, undertake efforts to secure funding from any source, and withdraw from participation in the IRWMP at any time.

The PR Subcommittee developed an online proposal submission section on the NSV IRWMP website (see Appendix J) and launched this website feature on July 16, 2012. The PR Subcommittee sent a press release (see Appendix J) several weeks prior to the website launch date to notify potential project proponents in the region that project solicitation and submission would begin in July 2012.

5.1.1.1.1 Project Proposal Application

The Proposal Instructions provided detailed step-by-step directions regarding the submittal and review process, and informed potential project proponents that the application requires information regarding the proposed project to provide reviewers sufficient information to determine if the project meets criteria for potential inclusion into the IRWMP projects and programs database. The instructions stated that proposals adopted as part of the NSV IRWMP would be eligible for future IRWM-specific funding opportunities, as grant solicitations became available. It also noted that it was becoming more common that other funding opportunities for project/program implementation also require or give preference to projects/programs that are included in an IRWMP. In addition to potential funding opportunities, the projects/programs database will be used to better integrate and coordinate projects/programs for improved water management.

The Proposal Instructions also informed potential project proponents of the process that would be used to include projects and programs in the IRWMP.

Before an applicant could upload a new project proposal on the website, they had to first register as a user by creating an online account, signing in as a member, and reading and agreeing to the New Proposal Submittal Agreement and Terms of Use Agreement. After that initial step, applicants had seven sections to fill out. Some fields, denoted with an asterisk, were required to be filled-out in order for an application to be considered complete and publishable. Proposals had to be published to be considered for inclusion in the IRWMP. Any visitor to the website was able to view a summary of published proposal information on the ‘Published Proposals’ tab of the website and on an interactive map on the website.

The seven sections included:

1. Organization Information
2. General Proposal Information
3. Funding
4. Permitting
5. Collaborative Partnerships
6. Location
7. Strategies and Benefits

Information requested on the application included the project name, description, an explanation of why the project or program was needed, project phase, anticipated start date, location, sources of funding - including cost-share, status of permits, description of collaborators and political support, and the IRWMP objectives that applied to the project. Screen shots of the full application are shown in Appendix J.

Applicants were able to save their entered information by clicking the 'Save' button and could work on their application over several days. Upon completion of the proposal forms, applicants were able to print and review the proposal information, upload supporting documents, and confirm that all required information was provided on the project form, prior to submitting.

Once the proposal was submitted, the applicant no longer had access to their proposal information. Once the PR Subcommittee's review was complete, the applicant was either notified that their submittal was incomplete or that their project had been published. Ultimately, proposal summary information – including organization name, project name, project description summary, major streams or watersheds, current project phase, project cost, matching funds, and project location - became viewable by the public under the 'Published Proposals' section of the website for all submitted projects.

5.1.1.1.2 Responses to the Call for Project Submittals

Proposals were received on the online submittal portion of the website through 5 p.m. on August 9, 2012. A total of 58 proposals were received and made available on the website for public viewing. Although a wide variety of projects were received during the submittal period, the NSV Board, per the PR Subcommittee's recommendation, re-opened the project submittal opportunity for a second round of submittals between October 10 and October 31, 2012 for the following reasons (in no particular order):

1. Several potential project proponents requested more time to complete their submittals. Some project proponents felt they were not given enough notice prior to the initial due date to acquire their required board or agency approval to submit projects, especially if the projects were in the conceptual stage.
2. Several project proponents (existing and potential) could have new ideas for projects, or integration of projects, based on their review of the initially submitted projects.

3. Potential project proponents, and those that have submitted projects, could have additional ideas for projects or project integration following the outreach meetings in late September 2012.
4. Some projects were accepted after the deadline due to technical difficulties they experienced. To ensure fairness, the NSV Board chose to re-open the submittal process to provide everyone with an equal opportunity for project submittals.
5. Technical difficulties may have excluded some project submittals for which the NSV Board and PR Subcommittee were unaware.
6. It was made clear at the August 2012 TAC meeting that the NSV Board was also interested in receiving project concepts, and not just fully defined projects. Prior to the August 2012 TAC meeting, potential project proponents may not have clearly understood that projects in the concept phase were eligible to be submitted.
7. It was the desire of the PR Subcommittee and NSV Board to include as many projects in the region as possible that align with the region's objectives.
8. After reviewing the proposed projects, the PR Subcommittee could identify opportunities to improve or align projects through editorial review and facilitated communication and collaboration among project proponents.

The PR Subcommittee sent a press release (see Appendix J) a few days prior to re-opening the submittal process on October 10, 2012 to notify potential project proponents in the region. An additional 41 projects were received during the second submittal process, for a grand total of 99 projects submitted for potential ranking. In addition to the list of 99 projects submitted to be ranked, ten projects were submitted as "Projects-to-Track". Projects-to-Track were solicited to be included in the IRWMP to simply acknowledge projects in the region that either may have an effect on water management activities in the region but might not necessarily be seeking funding through the NSV IRWMP or may be on the horizon for future consideration but which essentially (concept projects) were not yet developed enough to be ranked according to the criteria of the prioritization process. One example of a Project-to-Track is the North-of-the-Delta Off-stream Storage project which has the potential to create substantial impacts or benefits to regional water management. Projects submitted for tracking will not be considered for IRWM-related funding opportunities unless or until they are more fully developed and submitted to the region for ranking. Project proponents were informed that project and program submittals would be ranked (prioritized) for inclusion in the NSV IRWMP unless project proponents specifically requested to have their project included as a Project-to-Track in the NSV IRWMP.

Although 99 projects were initially submitted for ranking, the NSV Board decided at its meeting on December 3, 2012 to move the 24 projects submitted by the California Department of Fish & Wildlife to the Projects-to-Track list rather than to rank these projects. This decision was made because the Department of Fish & Wildlife was not the project proponent or project sponsor. The NSV Board decided that the projects submitted by the Department of Fish & Wildlife should be on the Projects-to-Track list until such time that local project proponents stepped forward. Therefore, in December 2012, 75 projects were ranked for inclusion in the IRWMP and 34 projects were included on the list of Projects-to-Track.

To allow additional projects and programs to be submitted and to provide an opportunity for projects to be transferred from the tracked to the ranked list, a third round of proposals were solicited and received between April 5 and May 2, 2013. The PR Subcommittee sent a press release (see Appendix J) a few days prior to re-opening the submittal process on April 5, 2013 to notify potential project proponents in the region. This most recent project submittal round included the submission of 17 new projects, the removal and/or modification of three previously submitted projects, the transition of 24 projects from the Projects-to-Track list to the ranked list, and the submission of one new project to the Projects-to-Track list. In summary, 113 projects were submitted for ranking through the third submittal round (75 projects from the previous two submittal rounds, plus 24 projects moved from Projects-to-Track to ranked, plus 17 new projects, minus three replaced projects). A summary of the currently ranked projects is provided in Appendix G.

Resolutions from the respective governing bodies of each of the project proponents included in Appendix G will be provided to show approval and support of the NSV IRWMP. These resolutions will be provided sometime after the IRWMP is initially adopted by the NSV IRWM Board in early 2014, but prior to when an application for IRWM implementation funding is submitted. In the meantime, letters of support from each of the project proponents are included in the back of Appendix G. Resolutions from the project proponent organizations that have already adopted the NSV IRWMP are included in Appendix G, after the letters of support.

Project proponents were also encouraged to integrate projects where possible for broader cross-jurisdictional and regional efficiency and/or benefits. Project proponents that submitted projects in the initial or second solicitation round were encouraged to use the second and third submittal periods as opportunities to integrate their project(s) with other previously submitted project(s) or program(s), and/or to “fine tune” their project submittals based on the prioritization criteria.

5.1.1.2 Future Project Solicitation Procedure

The NSV Board has discussed that future IRWM solicitation rounds will have a similar process to that used in 2012 and 2013 to solicit the initial list of projects for the IRWMP database. Although the NSV Board reserves the right to modify the solicitation process in the future, it currently plans to re-open the solicitation process on an annual basis. The NSV Board will continue to offer both online and hard copy submittals. Appendix K includes a list of steps that the Board anticipates following for future project solicitation processes. As funding opportunities arise and as the Board sees appropriate, the Board will rank projects. The Board will not rank new projects, or re-rank existing projects, as new projects are added to the IRWMP. The Board will rank projects in response to specific funding opportunities as indicated in Appendix L.

The NSV Board intends to adopt the updated list of projects (Appendices G, H, and I) each year, but not re-adopt the entire IRWMP each year. The NSV Board only plans to adopt updates to the IRWMP at times when significant sections of the IRWMP are changed or modified, excluding when project lists or other appendices are updated. However, when the IRWMP updates are adopted, the most recently adopted list of projects will be included in the adopted IRWMP update.

In addition to the NSV IRWMP, several member counties are also engaged in preparing the Mid & Upper Sacramento River Regional Flood Management Plan (MUSR RFMP) and the Feather River Regional Flood Management Plan (FRRFMP), which will ultimately produce prioritized lists of potential flood management projects located within the NSV Region. It is the intent of the NSV IRWM Board to integrate the unranked list of MUSR RFMP and FRRFMP projects into the NSV IRWMP "Projects to Track" list (Appendix I). Following scoring of the projects by the MUSR RFMP and the FRRFMP it is the intent of the NSV Board to move the scored projects from the NSV IRWMP list of Projects-to-Track to the Ranked Projects list at a future NSV Board Meeting, following review and approval by the NSV TAC.

5.1.2 Procedures for Review of Projects to Implement the IRWMP

The procedures that the RWMG used to review projects under this IRWMP and will use to review projects in the future are discussed below.

5.1.2.1 2012/2013 Project Review Procedure

As explained in the proposal instructions, the PR Subcommittee took the lead in reviewing submitted projects, but relied on the NSV Board to ultimately approve the inclusion of projects in the IRWMP. The specific steps used in the 2012 and 2013 project submittal and review process, and approximate timing, are listed below.

1. Proponents completed preliminary on-line or hard copy project/program information. (July-August 2012, October 2012, April-May 2013)
2. The PR Subcommittee reviewed the proposals for clarity and eligibility, and followed up with proponents as needed. (July-August 2012, October-November 2012, April-May 2013)
3. The PR Subcommittee reviewed and determined whether proposals met minimum eligibility requirements. (July-August 2012, October-November 2012, April-May 2013)
4. The PR Subcommittee 'published' and summarized a listing of eligible IRWMP projects/programs for TAC and NSV Board consideration. (August 2012, November 2012, May 2013)
5. The PR Subcommittee, TAC, and NSV Board received public comment on submitted project proposals. (August-December 2012, May-June 2013)
6. The PR Subcommittee reviewed proposals, considered the potential for integration among submitted projects/programs, and ranked IRWMP projects and programs. (November 2012 and May 2013)
    a. Review projects for potential integration opportunities. Project proponents were encouraged early in the process to integrate projects where possible for broader cross-jurisdictional and regional efficiency and/or benefits.

b. Determine if a submitted project is to be ranked or tracked, based on the project proponents' request. Ranking was encouraged in order to demonstrate project qualifications for future funding. All submitted projects were initially ranked unless the project proponent had requested otherwise by October 31, 2012 during the first and second round of submittals and May 2, 2013 during the third round of submittals.
c. For projects to be ranked, points were assigned to factors A through J presented in Section 5.1.2.1.1. Next, proposed projects were evaluated based on factors K through N (presented in Section 5.1.2.1.2).
d. Use the ranked list to group projects into the following categories to include in the draft IRWMP:
   i. top projects by project type/status category
   ii. top projects by county;
   iii. top projects by goal;
   iv. top DAC projects; and
   v. top Tribal projects.

7. The TAC received public comment and created a recommendation to the NSV Board on projects and programs. (November 15, 2012; May 16, 2013)
8. The NSV Board accepted public comments and selected projects and programs for inclusion in the IRWMP. (December 3, 2012; June 3, 2013)

Note that DWR IRWM Guidelines require all projects to be ranked, even though there is not a current funding stream or criteria. Development of the ranking criteria was valuable in that it illustrated the difficulty of sorting a broad variety of projects.

The flowchart shown in Figure 5-1 (located at the end of Chapter 5) was developed to visually show the process for project review and prioritization (step 6, above), including how to track large, conceptual projects (that are not yet specifically defined) into the IRWMP.

In addition to these steps for inclusion in the IRWMP, potential applicants were informed that additional proposal information would be required when specific grant opportunities became available. When the NSV Board issues funding solicitations and calls for proposals, NSV IRWMP project proponents will be allowed to edit their preliminary proposal, and upload any new information in light of the specific grant requirements.

The PR Subcommittee prepared draft project review criteria for prioritizing project and program submissions in August 2012 and presented them to the NSV Board and TAC for discussion/possible action in September 2012. A written description of the recommended method of prioritization was provided along with a sample scorecard and flow chart. During the month of September 2012, the public was asked to comment on the proposed approach to prioritization as presented to the NSV Board and TAC and in the three Round 2 Public Outreach workshops held in September 2012 (refer to Chapter 3 Plan Development Process) as well as provide their ideas and comments on integration opportunities.

In response to the NSV Board, TAC, and public comment, in early October, the PR Subcommittee revised the prioritization criteria to expand the local matching funds factor to include in-kind/labor/other non-monetary contributions as well as monetary cost-share contributions. The PR Subcommittee did not make any other changes to the proposed prioritization criteria until June 2013 when the criteria for receiving Tribal benefit points was made more stringent so that only projects in which a Tribe is a primary beneficiary would receive tribal benefit points.

Project ranking was conducted using a point-based system based on factors A through J listed in Section 5.1.2.1.1. Ranked projects were also qualitatively evaluated based on factors K through N listed in Section 5.1.2.1.2. All factors evaluated are described in the sections that follow.

5.1.2.1.1 Point-Based Factors

Scores were based only on information submitted by the project proponents during the project submittal process. Staff did not separately evaluate the information submitted by project proponents. During a ranking process for a specific funding opportunity, the information provided by project proponents will need to be verified. Factors A through J are described below. Factors with an asterisk are required by the DWR IRWM Guidelines to be considered when ranking projects.

A. *Number of NSV IRWMP Objectives addressed. This factor is the primary determinant of score; it is weighted most heavily compared to all other factors.
   i. Number of objectives met
   ii. Type of need met (higher weight for higher priority primary and secondary objectives – *i.e.* critical health & safety objectives get the most weight. This is based on the priority that was established for each NSV IRWMP objective - either “critical”, “foundational”, “high”, or “medium” priority - when the NSV Board adopted the Goals and Objectives in June 2012. Note: A score is only given for one objective: the highest of the primary and secondary objectives.)

B. *Multi-Benefit
   i. Meets objectives under more than one NSV IRWMP goal
   ii. Number of committed collaborative partners (Note: A score is given in only one category for each partner. If a partner meets multiple categories, then the category with the highest point value is used for scoring.)
   iii. Benefits more than one county

C. *Readiness to proceed/project status (Based on project phase. Higher weight for projects that are closer to the construction/implementation phase. Note: Points are only awarded for one project phase. If multiple phases are provided in a submittal, points will be based on the highest scoring phase.)

D. Local contribution to cost share (including both monetary and non-monetary/in-kind contributions). This is the local share of total cost or local "matching funds" – *e.g.* for a local agency's project with 50% matching funds, the local agency can fund half of the total project cost.

E. *Benefits to DACs, a DAC is defined as an area where the median household income is less than 80 percent of the Statewide average. The DAC cutoff is currently (2013) $48,706 per year.

F. *Benefits to Tribes (California Native American Tribes – *i.e.* federally recognized or non-federally recognized). Projects claiming a benefit to Tribe must (1) list a Tribe as a primary project beneficiary and (2) address water supply, flood control, water quality, watershed protection, and/or public education needs of a Tribe to receive Tribal benefit points.

G. *Economic feasibility (assessed with a cost-effectiveness analysis or cost-benefit analysis). Projects are not disqualified if they have not done a cost analysis, but they earn extra points if they have done one, and if they can show project benefits outweigh costs.

H. *Number of statewide priorities addressed.

I. *Number of resource management strategies utilized.

J. *Ability of the project to assess vulnerabilities to climate change, adapt to the effects of climate change, or mitigate climate change. This factor has a very low weight compared to all other factors, because impacts of climate change on water management are expected to be relatively low for the NSV region. Assessing vulnerabilities to climate change and minimizing GHGs is incentivized to projects through points in the project review process, but the NEPA and/or CEQA permitting process prior to project implementation will further act to reduce specific project's impact on climate change.

Figure 5-2 (located at the end of Chapter 5) lays out the scorecard used for assigning points based on the factors described above. The scorecard shows the number of points for each factor and the corresponding weight for each factor. Points were objectively given to each project based on information provided on the project submittal form. The PR Subcommittee developed this approach with the intent of making the prioritization process as simple and objective as possible, while still considering the factors required in the DWR IRWM Guidelines.

Table 5-1 shows the weight that each factor had on the overall scoring.

Table 5-1. Weight of Each Quantitative Factor on Overall Project Score[(a)]

Criteria	Overall Weight of Factor
Number of NSV IRWMP Objectives Met	24%
Local Matching Funds	14%
Primary Beneficiary is DAC	8%
Primary Beneficiary is Tribal	8%
Type of Need Met (highest scoring of primary or secondary objective)	8%
Number of Committed Collaborative Partners	8%
Meets Objectives Under More Than One Goal	6%
Number of Statewide Priorities Met	6%
Number of Resource Management Strategies	6%
Program Phase	5%
Benefits More than one NSV County	4%
Economic Feasibility Analysis	2%
Vulnerability, Adaptation, Mitigation of Project to Climate Change	2%

[(a)] see scorecard in Figure 5-2 (located at the end of Chapter 5) for further scoring details

5.1.2.1.2 Qualitative Factors Considered for Ranked Projects

After the initial numeric scoring, subjective factors were considered. Qualitative factors K through N are described below. Factors with an asterisk are required by the DWR IRWM Guidelines to be considered when ranking projects. One minimum criterion that is not listed below is the factor of whether the project proponent has adopted or will adopt the NSV IRWMP. During the IRWMP development, it was assumed that all project proponents would eventually adopt the NSV IRWMP since the project proponent had to agree to provide a letter of support in the New Proposal Submittal Agreement. Prior to the NSV IRWM Board approving the IRWMP, it was unreasonable to expect project proponents to provide adoption resolutions and, therefore their provision of a letter of support was deemed sufficient to have them included in Appendix G and H. Projects without a letter of support from their project proponent were not included in the Appendix G and H project lists. As adoption resolutions from project proponents are received, they are added to Appendix G. Projects still without an adoption resolution from their project proponent at the time of an IRWM grant application submittal will be removed from the Appendix G and H project lists.

K. *Technical feasibility of the project. The PR Subcommittee made a conceptual technical feasibility determination based on information provided in the proposals.

L. *Environmental Justice (EJ). Environmental Justice is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (California Government Code §65040.12(e)). If EJ concerns are raised, the NSV Board may choose not to include the project in the ranked lists until EJ concerns are addressed in a good faith effort.

M. *Project costs and financing. A basis for cost estimate must be provided for inclusion in the ranked lists in the IRWMP.

N. Potential conflict with one or more NSV IRWMP objectives. In the event that a project conflicted with any NSV IRWMP objective(s), the NSV Board had the option of not including the project in the ranked lists.

The PR Subcommittee reviewed each submitted project for conceptual, technical feasibility. None of the submitted projects appeared to have fatal flaws that would potentially result in the projects being technically infeasible. Therefore, all submitted projects are considered to have passed the technical feasibility criteria. Furthermore, all submitted projects provided a basic basis for their projects' costs and financing, and none of the projects were determined to potentially conflict with one or more of the IRWMP objectives. Lastly, none of the projects were deemed to have significant enough environmental justice issues associated with them to disqualify them from inclusion in the IRWMP.

5.1.2.1.3 Ranked Projects

The ranked projects were initially sorted into the following five categories as an example and are shown in Appendix G:

1. Shovel-Ready, Discrete Projects (includes hard project permitting, construction/implementation - may include mitigation monitoring associated with implementation)
2. Planning Projects (includes plans, studies, design, environmental permitting/documentation)
3. New Programs/Projects, Education and Research (includes Concepts, Feasibility Studies, Research and Education Programs)
4. Continuing/Ongoing Existing Projects/Programs (includes maintenance, monitoring)
5. Staffing/Support

The ranked projects were organized into these five categories because the PR Subcommittee thought it was most appropriate to only compare projects that would likely compete for the same sources of funding. For instance, a well construction project would not likely compete against a groundwater data collection research project (which uses existing wells). Therefore, these types of projects were assigned to separate categories. These categories also aid decision-makers in knowing what projects are ready to proceed with particular phases. Note that some projects may be ready to implement several phases at once or otherwise appropriately fit into more than one category. Therefore, some of the projects are shown in more than one category.

Although the projects are numerically ranked in an overall fashion, the projects are also shown in several ways in the tables in Appendix H to illustrate what the highest ranked projects are on the following lists: top projects by county, goal category (*i.e.* Water Supply, Flood, *etc.*), shovel-ready projects, DAC projects, and Tribal projects. Through these categories, a project that might not be top-ranking compared to all other projects in the region, may appear on another "top 10" or "top 5" list within the IRWMP. Tiers are shown on the sorted tables in Appendix H. Tier I is

for projects with a total score between 100 and 127, Tier II indicates a score between 60 and 99, Tier III indicates a score between 5 and 59 points.

Despite the rankings, it was emphasized to project proponents that being ranked highly on any of these lists does not influence the likelihood of receiving future funding since IRWMP projects will be re-evaluated for eligibility and priority when specific funding opportunities are considered. What is most important for all of the submitted, ranked projects is that they are included and recognized in the IRWMP - since inclusion in the IRWMP makes these projects eligible for IRWM-implementation funding opportunities and may also increase their opportunities for receiving funding from other grant sources.

5.1.2.1.4 Projects-to-Track

In addition to the list of 113 ranked projects, 11 projects were submitted as Projects-to-Track by the third round of project submittals. A summary of the projects-to-track are included in Appendix I. These projects were not ranked, but are included in the IRWMP to acknowledge projects that may be on the horizon for future consideration but which are not yet developed enough to be ranked according to the criteria of the prioritization process. One example of a tracked project is the North-of-the-Delta Off-stream Storage project which has the potential to create substantial impacts or benefits to regional water management. Projects submitted for tracking will not be considered for IRWM-related funding opportunities unless they are more fully developed and submitted to the region for ranking.

Ranked and tracked projects are both included and described in the IRWMP, however the tracked projects have significantly shorter descriptions, as there is less definition and information about these projects.

Inclusion in the ranked lists or projects-to-track list contained in the IRWMP does not constitute project “endorsement” by the NSV Board. Project “endorsement” will occur when individual projects are packaged and/or recommended for specific grant funding opportunities.

5.1.2.2 Future Project Review Procedure

The NSV Board will conduct future project submittal solicitations after the initial IRWMP is adopted, however the May 2, 2013 5:00 p.m. deadline was the last opportunity to submit projects for consideration to be included in the initial IRWMP.

After adoption of the initial IRWMP, project proponents’ projects that are not included by the NSV Board on the ranked lists in the IRWMP may be re-submitted for ranking during future project submittal periods to be determined by the NSV Board for updating the IRWMP. Ranked projects may also be updated to improve their rankings, moved between the tracked list and ranked lists, or integrated with other projects, during re-submittal periods (after adoption of the initial IRWMP).

The NSV Board may alter or update the submittal process and criteria for future submittals at its discretion, but it plans to continue to have the PR Subcommittee review projects as outlined in Appendix K. NSV Board modification of the project list does not require re-ranking of projects or re-adoption of the IRWMP. Future grant opportunities may require adding additional criteria

and re-ranking the IRWMP lists for that specific opportunity at a later date. The Board intends to respond to funding opportunities as described in Appendix L. If the Board decides to modify its intended approach for future project solicitations or responding to funding opportunities it may modify Appendices K or L without re-adopting the IRWMP.

5.1.3 Procedure for Communicating the list(s) of Selected Projects

All project submittals, whether submitted online or via hard copy, were published on the public NSV IRWM website (http://www.nsvwaterplan.org/app_pages/view/35) so that anyone could download summary information about all of the submitted projects. A function was also made available on the website to download the published project data into a table that could be copied to an Excel or Word program for easy viewing and sorting.

The list of submitted projects was published in the August 2012, September 2012, November 2012, and May 2013 TAC agenda packets and the September 2012, December 2012, and June 2013 NSV Board agenda packets. In addition the summary information of the 58 initially submitted projects was also made available in hard copy format at the Round 2 public outreach workshops. This summary was also posted on the 'Projects' page of the website. Three press releases (see Appendix J) inviting public comments on prioritization and integration, and inviting participants to submit projects during the second and third round of submittals, included information on where to access the list of already submitted projects.

The prioritization, and inclusion in the IRWMP, of submitted projects was discussed at the August, September, and November 2012 and May 2013 TAC meetings and the September and December 2012 and June 2013 NSV Board meetings. Once the NSV Board adopted the final list of projects to include in the IRWMP (both ranked and tracked), the final lists were posted to the NSV IRWM website (http://www.nsvwaterplan.org/app_pages/view/35) and project proponents were notified via email. In addition, the final list of projects was documented in the public meeting minutes from the December 2012 and June 2013 NSV Board meeting.

5.2 IMPACTS AND BENEFITS

The implementation of the IRWMP will occur as the projects included in this IRWMP are undertaken. Therefore, the impacts and benefits of implementing the IRWMP are the same as the impacts and benefits of the ranked projects included in this IRWMP. The stage of each project is slightly different so it is impossible to provide an accurate impact and benefit analysis of every project in this IRWMP. As projects near implementation, more detailed analyses and project-specific impact and benefit analyses will occur. On an annual basis, the NSV Board plans to evaluate the status of the projects listed in the IRWMP and request project-specific potential impacts and benefits from the project proponents. Prior to the NSV Board's endorsement of any project, a project-specific impact and benefit analysis must be provided to the NSV Board for their review.

The simplified, anticipated impacts and benefits of the IRWMP, to entities within the region, including DACs and California Native American tribal communities, as well as to entities within neighboring or overlapping regions, are described in the following sections.

Without discussing specific projects, many of these impacts and benefits were presented, discussed, and developed during the stakeholder workshops in Round 1 and 2. The multiple benefits were emphasized to encourage members of the public to support the development of the IRWMP and their participation in the IRWMP. It was also made clear, however, that without this IRMWP, any of these projects could still be implemented as long as they had funding and could obtain all appropriate permitting. The IRWMP effort is not regulatory in nature. However, by demonstrating regional support for high-priority projects in the region, these particular projects in the IRWMP may have a better chance at obtaining local, statewide, and even national support (whether financial or other form of support) than projects not included in the IRWMP.

5.2.1 Screening Level Impacts of IRWMP Implementation

The potential impacts of the ranked IRWM projects to the region and those outside of the region are shown in Table 5-2.

The majority of the negative impacts are generally due to temporary, but unavoidable construction. Other potential project impacts are purely speculative, and some parties may perceive as negative – while others would view as an overall positive impact. For example, many of the projects aim to present and/or collect information about water supply and quality. While this is useful for water planners, individual land owners or specific irrigation districts may not want information to become so readily available. Very few impacts are anticipated for stakeholders external to the region.

None of the 113 projects, submitted through the third round of submittals, were determined to cause specific, known environmental justice concerns – although several projects with construction-related components may present localized environmental justice concerns that will need to be resolved prior to implementation. None of the 113 projects, submitted through the third round of submittals, were determined to have potential impacts that were disproportionately associated with DACs.

Table 5-2. Known Impacts of Implementation of NSV IRWMP Programs and Projects

Goal Category	# of Projects Included in this Goal Category[a]	Nature of Projects in this Goal Category[b]	Within NSV RWMG	Inter-regional
			Potential Impacts	Potential Impacts
Water Supply Reliability	39	Tank improvement, data inventory updates, GWMPs, Groundwater Monitoring and Modeling, replacement of water mains and installation of water meters, watershed restoration, crop irrigation efficiency projects, irrigation canal modernization, dam replacement, well installation, in-lieu recharge, evaluation of groundwater recharge, and water quality assessment	Temporary construction-related impacts Unwanted information sharing about groundwater levels Unwanted tracking of water use	Less water flowing out of NSV region to neighboring regions due to increased irrigation efficiency
Flood Protection and Planning	11	Stream restoration, stream recharge, flood hazard preparation planning, canal master plan, storm drain rehabilitation, detention basin	Temporary construction-related impacts Loss of riparian acreage	
Water Quality Protection and Enhancement	20	Well abandonment program, well containment and treatment system, wastewater treatment plant upgrade, water treatment plant upgrade, aging infrastructure demolition, recycle residuals dewatering	Temporary construction-related impacts	
Watershed Protection and Management	29	Fish screen project, stream monitoring, wildfire protection plan, environmental monitoring program, river and park restoration, invasive species control	Temporary construction-related impacts Unwanted monitoring and access to remote areas, removal of habitat for species that have adapted to the presence of invasive species	
IRWM Sustainability	5	Climate stewardship coordinator, region-wide watershed model support, IRWMP grant support, environmental services for IRWMP projects	Unwanted widespread information shown on region maps such as land use, crop types, *etc.*	
Public Education and Information Dissemination	9	K-12 watershed education, K-12 science ambassador project, educational mural, well monitoring network, kids watershed stewardship program, region-wide IRWM outreach and education		

[a] Number is based on the 113 projects submitted through the third round of project submittals (May 2013). The numbers in this column will change as projects are added and removed from the ranked projects lists (Appendices G and H).
[b] For more detailed information on projects by goal category, refer to Appendix H.

5.2.2 Screening Level Benefits of IRWMP Implementation

The potential benefits of the 113 IRWM projects, submitted through the third round of submittals, to the region and those outside of the region are shown in Table 5-3.

In addition to the benefits listed in Table 5-3, several RMS, as described in Chapter 4, will be utilized through the implementation of the 113 projects submitted through the third round of submittals. The use of these RMS will be beneficial to the region as multiple, diverse strategies will be used to manage the region's resources and therefore mitigate against future uncertain circumstances.

Although none of the 113 projects, submitted through the third round of project submittals, were determined to cause specific, known environmental justice concerns or have potential impacts that were disproportionately associated with DACs, the majority of these projects also do not tend to have specific benefits to DACs. However, many projects will peripherally benefit DACs and some projects specifically address critical water-related concerns in DACs. A total of 87 projects, submitted through the third round of project submittals, benefit DACs in some way. Examples of projects that address specific, critical water supply needs of DACs include the Live Oak Flood Hazard Preparation Plan (Project ID #40), the Robbins Water Main and Meters project (Project ID #80), the Cortina Rancheria Water Assistance Plan (Project ID #27), the Town of Paradise Wastewater Collection System Project (Project ID #29), and the City of Orland Eva Drive Well project (Project ID #95). Examples of projects that peripherally benefit DACs tend to include projects with a wide area of benefit – often the entire region – such as the Regional K-12 Watershed Education project (Project ID #45), Butte County Well Abandonment Program (Project ID #98), and the Battle Creek Stream Monitoring Plan (Project ID #54). Other projects provide more localized benefits, but benefit the DACs in the area about the same amount as other residents in the area or provide specific benefits to DACs – but not necessarily meeting critical water supply needs. Examples of these projects include the Well Contaminant Treatment System (Project ID #32), the Rio Alto Wastewater Treatment Plant & Constructed Wetlands Project (Project ID #7), the Colusa Indian Community Council's Packer Ranch Pump Station and Fish Screen project (Project ID #24), the Paradise Irrigation District Magalia Dam Replacement (Project ID #33), and the City of Shasta Lake Recycle Residuals Dewatering Project (Project ID #47).

Comparing the potential benefits of the projects listed in Table 5-3 to the potential impacts listed in Table 5-2, it can qualitatively be concluded that the benefits of implementing the IRWMP and projects far outweigh the minor, and mostly temporary, impacts.

Table 5-3. Known Benefits of Implementation of NSV IRWMP Programs and Projects

Goal Category	# of Projects Included in this Goal Category[a]	Nature of Projects in this Goal Category[b]	Within NSV RWMG	Inter-regional
			Potential Benefits	Potential Benefits
Water Supply Reliability	39	Tank improvement, data inventory updates, GWMPs, Groundwater Monitoring and Modeling, replacement of water mains and installation of water meters, watershed restoration, crop irrigation efficiency projects, irrigation canal modernization, dam replacement, well installation, in-lieu recharge, evaluation of groundwater recharge, and water quality assessment	Improved knowledge of water supplies and use, improved ability to store and manage water supplies, improved in-stream flow, reduced pumping costs, decreased and/or prevention of groundwater overdraft	Improved knowledge of water supplies and use, decreased and/or prevention of groundwater overdraft
Flood Protection and Planning	11	Stream restoration, stream recharge, flood hazard preparation planning, canal master plan, storm drain rehabilitation, detention basin	Reduced flooding, increased aquifer recharge, runoff reduction, improved surface water quality, natural resources preservation and restoration, reduced risk to life and property, reduced flood insurance costs	Reduced flooding, increased aquifer recharge, runoff reduction, improved surface water quality, natural resources preservation and restoration, reduced risk to life and property, reduced flood insurance costs
Water Quality Protection and Enhancement	20	Well abandonment program, well containment and treatment system, wastewater treatment plant upgrade, water treatment plant upgrade, aging infrastructure demolition, recycle residuals dewatering, water treatment wetlands construction	Improved drinking water quality, improved aquatic and wetland species habitat and populations, increased cropland production, creation of wetlands and riparian habitat, improved recreation opportunities, decreased treatment costs	Improved aquatic and wetland species habitat and populations, increased cropland production, creation of wetlands and riparian habitat, improved recreation opportunities
Watershed Protection and Management	29	Fish screen project, stream monitoring, wildfire protection plan, environmental monitoring program, river and park restoration, invasive species control	Improved water supply quality, enhanced fish habitat, increased opportunities for recreational hunting/fishing and wildlife viewing, reduced flood risks, education opportunities, increased public safety, increase in natives species populations (with the removal of invasive species), improved fish and wildlife passage	Enhanced fish habitat, increased opportunities for recreational hunting/fishing and wildlife viewing, reduced flood risks, education opportunities, increased safety from wildfire protection
IRWM Sustainability	5	Climate stewardship coordinator, region-wide watershed model support, IRWMP grant support, environmental services for IRWMP projects	Improved region-wide coordination, increased funding opportunities, improved knowledge of the region's water supplies and water uses	improved knowledge of the region's water supplies and water uses
Public Education and Information Dissemination	9	K-12 watershed education, K-12 science ambassador project, educational mural, well monitoring network, kids watershed stewardship program, region-wide IRWM outreach and education	Increased educational opportunities, increased knowledge about water supplies in the region	Increased educational opportunities, increased knowledge about water supplies in the region

[a] Number is based on the 113 projects submitted through the third round of project submittals (May 2013). The numbers in this column will change as projects are added and removed from the ranked projects lists (Appendices G and H).
[b] For more detailed information on projects by goal category, refer to Appendix H.

5.3 PROJECT INTEGRATION

Integrating projects was largely encouraged amongst the individual project proponents, but also considered by the NSV Board, TAC, and PR Subcommittee.

Project proponents were encouraged to integrate projects where possible for broader cross-jurisdictional and regional efficiency and/or benefits. Project proponents that submitted projects in the initial solicitation round were encouraged to use the second submittal period as an opportunity to integrate their project(s) with other previously submitted project(s) or program(s). The project proponents' incentive to consider integrating their project with another entity or project may stem from not only practical economies of scale project cost-savings and efficiencies, but also from improving their project score and ranking in the IRWMP to increase their regional support and potential for funding.

The goal of integration is to meet the needs of the region rather than just the specific needs of specific entities in the region. As an example, in the first round of project submittals, multiple entities in the region proposed programs to improve water resource public education within their jurisdiction. In the second round of submittals, various region-wide public education programs were submitted. These region-wide programs improve efficiencies and still achieve the goal of public education in each entities' jurisdiction. By integrating each jurisdiction's ideas into a single region-wide program, the program may be more comprehensive and effective than a program conducted by any one individual entity. Although integrating construction-type projects would also be useful – such as if multiple communities propose to build individual pipelines to connect their wastewater collection systems to a wastewater treatment facility, then the communities that are relatively near each other may consider integrating and combining their projects to reduce the length of total pipe required - few integrated construction/implementation projects were submitted.

The PR Subcommittee also reviewed the submitted projects for potential integration opportunities – especially between the initial and second round of project submittals when there was an opportunity for project proponents to revise their applications. The PR Subcommittee encouraged integration through creating incentives in the project scoring system. Projects that were integrated received more points since integrated projects typically met objectives under more than one NSV IRWMP goal (factor B.i.), had a greater number of committed collaborative partners (factor B.ii.), and benefited more than one county (factor B.iii.).

The three Round 2 public outreach workshops also provided an opportunity for project proponents to communicate with each other and consider integration opportunities. The project proponents that had submitted during the initial round of project solicitations were specifically invited to attend, share a project poster and interact with other project proponents and members of the public.

5.4 RELATION TO LOCAL WATER PLANNING

The intent of this IRWMP standard is to ensure that the NSV IRWMP is in line with local water planning documents in the NSV region since the regional planning should not supersede local planning, but instead compile and incorporate the pertinent points of local plans.

The most recent local water planning documents published in the NSV region are listed by County in Table 5-4. These documents include standardized plans such as groundwater management plans and urban water management plans as well as plans tailored specifically for a local region such as the Colusa Basin Watershed Management Plan.

The jurisdiction of each local plan is noted in Table 5-4. All of these jurisdictions fall within or overlap the NSV IRWM boundary. If known, the adoption date and frequency of updates for each local plan is listed in Table 5-4. As the multitude of local plans continues to constantly change, it is impractical to update the IRWMP simultaneous with local plans. However, local water resource managers and land use planners tasked with updating local plans will be asked to inform the NSV Board of any changes that have been made at the local level that could impact existing or future regional planning efforts. Each time the NSV Board updates the IRWMP, the NSV Board will consider the changes that have been made to local plans since the previous adopted IRWMP. To successfully incorporate local plan changes in future IRWMPs, participation and engagement in the IRWM process by a wide variety of geographically diverse water resource managers within the region will need to continue. With this continued engagement, results of regional planning efforts can also successfully feedback to the local planning efforts. In general, if inconsistencies emerge between local and the IRWMP, the IRWMP will need to be modified for consistency with the local plans as one of the NSV IRWM foundational objectives is to preserve the autonomy of local governments, special districts, and Tribes.

In developing this IRWMP, the County staff from the TAC has coordinated water management planning activities with cities, various county staff, special districts, and others in their respective counties to ensure that the important, relevant elements of the local planning documents are incorporated into the NSV IRWMP. The ways in which particular management activities have been coordinated are described below.

5.4.1 Groundwater Management

GWMPs are the primary way that counties and other entities in the NSV region plan for groundwater management. Each county has its own GWMP which specifies groundwater coordination within that county. Some counties have multiple groundwater management plans because there are irrigation and special districts in which groundwater is utilized and is tracked separately from the county. Most of the county GWMPs cover areas of their county which other GWMPs do not cover, in order that all areas in the NSV region are covered. One exception to date is the Shasta County GWMP which only includes the Redding groundwater basin.

Table 5-4. Local Water Planning Documents

County	Local planning documents	Plan Type	Lead Agency	Adoption Date	Frequency of Updates	Plan Jurisdiction
Butte	Butte County GWMP (AB3030)	GWMP	Butte County Department of Water and Resource Conservation	2004	as-needed	Butte County
	South Feather Water and Power Agency 2010 UWMP	UWMP	South Feather Water and Power Agency	2012	every 5 years	County of Butte; City of Oroville; Oroville Union High School District; Oroville City Elementary School District; Palermo Elementary School District; Bangor Elementary School District; Oroville Mosquito Abatement District; Butte County Mosquito and Vector Control District; Lake Oroville Area Public Utility District; and, Feather River Recreation and Park District
	Paradise Irrigation District UWMP	UWMP	Paradise Irrigation District	2011	every 5 years	Paradise Irrigation Disctirct
	CalWater Chico-Hamilton City District UWMP	UWMP	California Water Service Company	2011	every 5 years	City of Chico and Hamilton City
	CalWater Oroville UWMP	UWMP	California Water Service Company	2011	every 5 years	City of Oroville
	Butte County Water Resources Inventory and Analysis and Update	other	Butte County	2009	as-needed	Butte County
	Thermalito Irrigation District GWMP	GWMP	Thermalito Irrigation Distrcit	1995		Thermalito Irrigation District
	Western Canal Water District GWMP	GWMP	WCWD	1995		Western Canal Water District
	Richvale Irrigation District GWMP	GWMP	Richvale Irrigation District	1995		Richvale Irrigation District
	Biggs-West Gridley Water District GWMP	GWMP	Biggs-West Gridley Water District	1995		
	Butte Water District GWMP	GWMP	Butte Water District	1996		
	Big Chico Creeek Watershed Aliance Strategic Plan 2007-2009	Wtrshd MP	Big Chico Creek Watershed Alliance	2007	as-needed	Big Chico Creek Watershed
	Little Chico Creek Watershed Management Plan	Wtrshd MP	Little Chico Creek Watershed Alliance		as-needed	Little Chico Creek Watershed
	Cherokee Creek Watershed Mgt Plan	Wtrshd MP	Cherokee Watershed Alliance		as-needed	Cherokee Creek Watershed
	Butte County GP	GP	Butte County	2010	as needed	Butte County
	Chico GP	GP	City of Chico	2011	as-needed	City of Chico
	Gridely GP	GP	City of Gridley	2010	as needed	City of Gridley
	Marysville GP	GP	City of Marysville			City of Marysville
	Oroville GP	GP	City of Oroville	2009	as-needed	City of Oroville
	Disaster Plans by Emergency Dept.	other	Butte County		as-needed	
	Flood Planning Process	other	County PW Department		as-needed/ongoing	
	Butte County Flood Mitigation Plan	other	Butte County	2006	5 year progress report	Butte County
	Butte County Multi-Jurisdictional All hazard Pre-Disaster Mitigation Plan	other	Butte County	2007	every 5 years	Butte County
	Drought Response Plan	other	County Drought Task Force			
	Butte Creek Watershed Mgt Plan	Wtrshd MP	Butte Creek Watershed Conservatory	2000	Receive Recommendations Annually	Butte Creek Watershed
Colusa	AB3030 Glenn-Colusa	GWMP	Glenn-Colusa Irrigation District (GCID)	1993	Annual Status Report	Glenn-Colusa Irrigation District
	RD 108 GWMP	GWMP	RD 108	Amended 2006		
	AB3030 Westside WD	GWMP	Westside Irrigation District			
	AB3030 RD1004	GWMP	RD 1004			
	Provident ID AB3030	GWMP	Provident Irrigation District			
	AB3030 Princeton-Codora-Glenn Irrigation	GWMP	P-C-G Irrigation District			
	Colusa County GWMP	GWMP	County Water Resources Dep't*; Colusa County Groundwater Commission	2008	As funding is available	Colusa County
	Colusa Basin Watershed Assessment	other	Colusa County RCD	2008		Colusa Basin Watershed
	Colusa Basin Watershed Management Plan	Wtrshd MP	Colusa County RCD	TBA Jan. 2013	As funding is available and watershed resources change	Colusa Basin Watershed
	City of Williams GP	GP	City of Williams	2012	as required	City of Williams
	Colusa County GP	GP	County Planning and Building	TBA 2012	as required	Colusa County
	City of Colusa Drainage Master Plan	other	City of Colusa	2009	as required (part of GP)	City of Colusa
	City of Colusa GP	GP	City of Colusa	2007	as required	City of Colusa
Glenn	Glenn County GWMP	GWMP	Glenn County	2000	as funding is available	Glenn County
	AB3030 Orland Artois	GWMP		2001	as funding is available	
	Glenn-Colusa Irrigation District GWMP (AB3030)	GWMP	Glenn-Colusa Irrigation District (GCID)	1993	as funding is available	Glenn-Colusa Irrigation District
	AB3030 Princeton-Codora-Glenn Irrigation	GWMP	P-C-G Irrigation District		as funding is available	
	Western Canal AB3030	GWMP			as funding is available	
	Water Supply Assessment for TCCA	WSA			as funding is available	
	Willows GP	GP			as funding is available	
	CalWater Willows UWMP	UWMP	California Water Service Company	2011	every 5 years	City of Willows
	Orland GP	GP	City of Orland	2012	as funding is available	City of Orland
	Glenn County GP	GP	Glenn County	1993	as funding is available	Glenn County
	AB3030 Provident ID	GWMP	Provident Irrigation District		as funding is available	Provident Irrigation District
Shasta	Coordinated GWMP for the Redding Groundwater Basin	GWMP	Shasta County Water Agency	2006	as funding is available	Redding Groundwater Basin
	ACID GWMP	GWMP	Anderson-Cottonwood Irrigation District (ACID)	2006	as funding is available	
	City of Redding UWMP	UWMP	Redding	2012	every 5 years	City of Redding
	Shasta County GP	GP	Shasta County	2004	Annual Status Report	Shasta County
	Redding GP	GP	City of Redding	2000	Annual minor technical updates	City of Redding
	Redding Areas Basin Water Supply Assessments	WSA	Shasta County Water Agency	2003		
	Redding Area Watershed Sanitary Survey	other	Shasta County Water Agency	2011	every 5 years	Redding Basin; Clear Creek Watershed
	City of Shasta Lake UWMP	UWMP		2012	every 5 years	City of Shasta Lake
	Joint Hazard Mitigation Plan	other	City of Anderson and County of Shasta	2011		Shasta County; and, City of Anderson
Sutter	County GWMP	GWMP	Sutter County	2012	as needed	Sutter County
	Sutter Extension Water District GWMP	GWMP	Sutter Extension WD	1995	as needed	Sutter Extension WD
	Feather Water District GWMP	GWMP	Feather Water District	2005	as needed	Feather Water District
	RD 1500 GWMP	GWMP	RD 1500	1997	as needed	RD 1500
	RD 787 GWMP	GWMP	RD 787	2005	as needed	RD 787
	Yuba City UWMP	UWMP	Yuba City	2011	every 5 years	Yuba City
	Sutter County GP	GP	Sutter County	2011	every 5 years	Sutter County
	Yuba City GP	GP	Yuba City	2004	every 5 years	Yuba City
	City of Live Oak	GP	Live Oak	2011	as needed	City of Live Oak
	County Master Drainage Plan	other	Sutter County	TBA Jan. 2013	as needed	Sutter County
	Multi-Hazard Mitigation Plan	other	Sutter County	2007	every 5 years	Sutter County
Tehama	Tehama County GWMP	GWMP	Tehama County Flood Control and Water Conservation District	2013	every 5 years	Tehama County
	El Camino Irrigation District GWMP	GWMP	El Camino Irrigation District	1995		El Camino Irrigation District
	Red Bluff UWMP	UWMP	City of Red Bluff, Dept of Public Works	2005		City of Red Bluff
	Corning UWMP	UWMP				City of Corning
	County Water Supply Inventory	WSA		2003	no	Tehama County
	Tehama County GP	GP	Tehama County	2009	Annual Status Report	Tehama County
	Red Bluff GP	GP		Housing Updated 2008		City of Red Bluff
	Corning GP	GP				City of Corning
	Tehama GP	GP				City of Tehama
	County flood mitigation plan	other		2006		Tehama County
	County local hazard mitigation plan	other		June 1997		Tehama County
	County Emergency Response Plan	other		2001		Tehama County
	Tehama County Hazard Mitigation Plan Vol2: Planning Partner Annexes	other	Tehama County	2012	every 5 years	Tehama County
	Tehama County Hazard Mitigation Plan Vol1: Planning Area-Wide Elements	other	Tehama County	2012	every 5 years	Tehama County

GWMPs are voluntary and are not on a routine update schedule throughout the region. Typically, GWMPs are produced or updated only as funding is available – which can be sporadic. Therefore, even if the IRWMP could be updated every time a local water plan was updated, a regular schedule is not possible for updating the IRWMP in order to maintain consistency with local GWMPs as they are updated and created within the region. The existing county GWMPs vary widely in adoption dates. The Tehama County GWMP was just adopted in 2013 and Sutter County's GWMP in 2012, and Shasta County's was updated in 2006.

The County staff from the TAC is aware of the various groundwater management activities in their region and has communicated with the other local groundwater management entities, as applicable, and has reviewed the IRWMP to ensure that the regional plan is aligned with local plans. Furthermore, representatives from several groundwater management plan lead agencies have also been actively engaged in the NSV IRWMP process. For example, Lewis Bair of Reclamation District 108 (RD 108) (Colusa County), Stan Wangberg of Anderson Cottonwood Irrigation District (ACID) (Shasta County), and Greg Johnson of Western Canal Water District (WCWD) (Butte County) are NSV Board members. Therefore, if regional planning efforts dictate that changes are necessary to future GWMPs, these representatives from lead GWMP agencies that participate in the NSV process can carry that message to their local agencies. For lead agencies of GWMPs that don't actively participate in the regional efforts, the County staff from the TAC will relay this information back to the GWMP lead agencies in their counties. As a second level of assurance, most local agencies in the region receive regular IRWMP updates through the NSV IRWM website and email listserv, and have been encouraged to review the IRWMP for consistency with their local plans.

A foundational objective, Objective 5-1 of the IRWMP is to "preserve the autonomy of local governments, special districts, and Tribes." If inconsistencies between the local GWMPs and the IRWMP emerge, the IRWMP will need to be revised to reflect the local GWMP – unless the GWMP is out-of-date and the next GWMP update will include the same information contained in the IRWMP. Unfortunately, the IRWMP effort doesn't have the budget or time to update outdated local plans, so the regional planning effort relies upon coordination with representatives of local GWMPs to be both consistent with local plans and include up-to-date information.

As an example of some known specifications for groundwater management in the region, Butte County has an ordinance that wells must be a specific distance from each other based on their diameter (Ch. 23B of the Butte County Code) and if a water transfer contains a groundwater component, then a permit and EIR are required (Ch. 33 of the Butte County Code). The IRWMP is consistent with these local restrictions as the IRWMP does not go to the level of detail of specifying well distances or authorizing water transfers, but also does not contain any projects that violate either of these specifications. In general, a project will not be accepted into the IRWMP if it violates any local ordinance or other local agency restriction. To the TAC and NSV Board's knowledge, all of the projects contained in this IRWMP are consistent with local groundwater management planning efforts.

5.4.2 Urban Water Management

State law requires water utilities serving 3,000 or more water connections, or distributing at least 3,000 acre-feet of water per year, to prepare an urban water management plan (UWMP) every five years. According to the IRWM Guidelines: Water suppliers who were required by the Urban Water Management Planning Act (CWC §10610 *et seq*.) to submit an Urban Water Management Plan (UWMP) to DWR must have submitted a complete UWMP to be eligible for IRWM Grant Program funding. Applicants and project proponents that are urban water suppliers and have projects that would receive funding through the IRWM Grant program must have a 2010 UWMP that has been verified as complete by DWR before a grant agreement will be executed. The NSV Board encourages all water utilities in the region that are required to prepare UWMPs to be in compliance with this requirement. The latest round of UWMPs was due to the state in June 2011. The next set of UWMPs will be due in December 2015.

As appropriate, information from the region's various UWMPs has been incorporated into the IRWMP. However, the IRWMP generally does not contain the same level of detail on urban water supply issues that UWMPs do. The regional plan largely leaves detailed urban water management activities to local jurisdictions. However, basics of UWMPs such as providing long-term resource planning and ensuring adequate water supplies are available to meet existing and future water demands, are incorporated into the IRWMP. The IRWMP and UWMPs have similar goals which are to provide long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. Both plans also have a 20-year planning horizon.

UWMPs provide essential foundational information to help meet the water supply reliability goal of the IRWMP. For example, UWMPs provide information to help achieve Objective 1-1, which documents baseline conditions and trends for surface water and groundwater resources, and Objective 1-2, which quantifies current and future water demands for the specific service areas being addressed.

To ensure that all communities in the region are covered, the IRWMP focuses attention on DACs, Tribes, and other small communities that typically are not covered by an UWMP. Throughout the region, many rural homes and some developments are outside the boundaries of water districts. This developed land not covered by water utilities does not have readily available estimates of water use. The IRWMP may include an initial, preliminary water balance of existing conditions for the region which could help fill-in the knowledge gap for these rural development areas.

Since the next set of UWMPs will not be completed until late 2015, the IRWMP may contain more up-to-date information than what is in the 2011 UWMPs. The region's water supply portfolio and water demand information contained in the IRWMP may be informative to water utilities in the region as they prepare their next UWMPs. More broadly, the IRWMP advocates for preserving existing water rights, area-of-origin statutory protections, and CVP and SWP contract supplies (per Objectives 1-6, 1-7, and 1-8). The IRWMP will advocate for continued water supply reliability and water rights protections throughout the region which will help support the effort of local water utilities in the region as they plan for their water supply future.

To the extent that these plans overlap, the County staff from the TAC will coordinate with the water utilities in their counties on urban water management activities. Staff has also reviewed the IRWMP to ensure that the IRWMP aligns with, and is not in conflict with, local UWMPs. In keeping with foundational Objective 5-1, preserving the autonomy of local governments, special districts, and Tribes, if inconsistencies between the local UWMPs and the IRWMP emerge, the IRWMP will need to be revised to reflect the local UWMP – unless the UWMP is out-of-date and the next UWMP update will include the same information contained in the IRWMP.

5.4.3 Water Supply Assessments

Since 2007, as part of the California Environmental Quality Act (CEQA), a water supply assessment (WSA) has been required when a residential development with greater than 500 dwelling units is proposed or if proposed development represents more than 10 percent of a public water system's service connections for existing public water systems with less than 5,000 service connections. In the NSV region, WSAs are typically prompted by the 10 percent exceedance of existing service connections since many communities in the region are small enough to where it does not take a very large development to exceed 10 percent of the existing connections. WSAs are associated with proposed developments and therefore are only completed once and never updated except in the rare case that the same development is rejected and later re-proposed. The one-time nature of the WSAs means that the IRWMP will provide little feedback to existing WSAs. However, information provided in the IRWMP may be useful for those preparing new WSAs in the region since the IRWMP outlines the water resources generally available and used in various areas of the region. Likewise, information provided in existing WSAs will be useful as the region description of the IRWMP is developed because WSAs indicate where urban growth is likely to occur in the region.

Because they are associated with developments, WSAs are typically very focused on just the particular area in question and do not provide information for the greater urban area or region. WSAs, however, can be useful in filling-in information gaps for areas not covered by an UWMP.

County staff from the TAC has reviewed the most recent WSAs, such as the Adams Tentative Subdivision and Reddington Ranch Subdivision in Colusa County and Sutter Pointe in Sutter County, and confirm that this IRWMP is consistent with them. It will be the responsibility of those that prepare future WSAs to review and incorporate appropriate aspects of the IRWMP into the new WSAs – similar to the way WSAs already incorporate information provided in UWMPs.

5.4.4 Agricultural Water Management

Senate Bill X7-7, passed in November 2009, mandates agricultural water suppliers, serving more than 25,000 irrigated acres, to develop Agricultural Water Management Plans (AWMPs) by the end of 2012 that outline the water supplies and use within the supplier's jurisdiction. Water suppliers serving between 10,000 and 25,000 irrigated acres are required to develop an AWMP only if funding is provided. AWMPs must include information relating to the water efficiency measures the supplier has undertaken, and is planning to implement, as well as information about water measurement. In addition, AWMPs must include an evaluation of the effect of climate change on future water supply reliability.

According to the IRWM Guidelines: Beginning July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the State unless the supplier complies with SBx7-7 water conservation requirements outlined in Part 2.55 (commencing with §10608) of Division 6 of the CWC.

The NSV Board encourages all agricultural water suppliers in the region that are required to prepare AWMPs to be in compliance with this requirement. AWMPs are not on a regular schedule for required updates although the next set of AWMPs will be due in 2015 and the following set in 2020 – which will perhaps set the pattern for a future 5-year interval cycle. Although specific AWMPs have not been developed yet, many of the large irrigation districts in the region, such as ACID, GCID, TCCA, and RD 108 are part of a Sacramento Valley Basinwide Water Management Plan which was prepared in 2004 for Sacramento River Settlement Contractors as a requirement by the Bureau of Reclamation. This regional water management plan was updated in 2007 and 2010. This regional plan is expected to meet the requirements of the state's newly required AWMPs so that Sacramento River Settlement Contractors do not have to produce duplicative plans to meet state and federal requirements. This plan will be updated every five years from 2007 to meet both state and federal requirements.

The NSV region is dominated by agriculture. Sutter County, in fact, by acreage is 94% irrigated agriculture. Therefore County staff from the TAC is acutely aware of agricultural water management activities in the region. The County staff's participation in the IRWMP process, coupled with the participation from representatives from several prominent irrigation districts in the region, such as NSV Board members Lewis Bair of RD108 (Colusa County), Stan Wangberg of ACID (Shasta County), and Greg Johnson of WCWD (Butte County), and TAC member Jeff Sutton of the TCCA (Colusa County) have ensured that the IRWMP is consistent with local agricultural water management activities.

As the AWMP is a new statewide requirement, the IRWMP process has helped local agricultural water suppliers through offering a forum for communication and coordination on how to comply with the new regulation. The IRWMP itself may also serve as a source of information for agricultural water suppliers as they update their AWMPs.

Similar to the planning efforts discussed above, if inconsistencies between the local AWMPs and the IRWMP emerge, the IRWMP will need to be revised to reflect the local AWMP unless the IRWMP is more up-to-date than the AWMP.

5.4.5 City and County General Planning

According to California Government Code Section 65300, every city and county in California must adopt a comprehensive long-term General Plan. General Plans are prepared by local city and county governments in the region to layout long-term plans for development. The housing element of each jurisdiction's General Plan must be updated at least every five years, but otherwise the state does not have a requirement for local governments to update their General Plans at certain frequencies. It is up to local governments to determine when to update the General Plan.

City and County General Plans are typically led by city or county land use planners and include a discussion about existing and future water demands and supplies under the conservation element. Potable demands for urban and commercial uses in developed (and proposed developed) areas, as discussed, in addition to the need for non-potable water to meet landscaping, parks, sports fields, and other non-potable demands. However, in most of the NSV counties, water managers at the city and county levels have been involved in General Plans to, at least, a limited extent. For example, through successful coordination between water managers and land use planners in Shasta County, Shasta County's general plan considers the amount of water available for additional development by water purveyor.

Through the review by County staff appointed to the TAC and their colleagues at the county and city levels, this IRWMP is consistent with the city and county General Plans in the region.

5.4.6 Other Resource Management Planning (flood protection, watershed management, multipurpose planning, stormwater management, *etc.*)

In addition to the standard planning activities listed above, Butte, Colusa, Glenn, and Shasta Counties each have one or more watershed management plans. For example, NSV members Colusa County and Glenn County, along with non-NSV member Yolo County, are part of the Colusa Basin Watershed Management Plan. Butte, Shasta, and Tehama Counties each have flood mitigation plans while Sutter County has floodplain management rules laid out in its ordinance code. Butte, Shasta, Sutter, and Tehama Counties also have disaster/hazard mitigation plans. Through participation of the County staff appointed to the TAC, recommendations on the plan made to the NSV Board regarding the IRWMP have been reviewed and checked for consistency with these other local planning documents.

Resource management planning documents and regulations are required at the local level to protect local community interests. However, the local planning documents and regulations noted in the paragraph above are not in conflict with, and often further the emphasis of, the goals and objectives of the NSV IRWM region. For example, several specific flood control management regulations are described in the Sutter County Ordinance Code in Chapter 1780 with the purpose of protecting human health, minimizing the expenditure of public money for costly flood control projects. These regulations clearly outline procedures minimizing the need for rescue and relief efforts associated with flooding and other disasters which might be undertaken at the expense of the general public, minimizing prolonged business interruptions, damage to public facilities such as water, sewer, and gas mains, and many other local purposes. Local planning documents and regulations are typically needed to provide specific guidance in areas such as construction standards and insurance requirements. The NSV IRWMP is consistent with these local restrictions, but is also broader in scope and does not include these specific details that are provided by local entities. At the same time, the IRWMP also does not contain any projects that violate these local plans and specifications. As stated previously, a project will not be accepted into the IRWMP if it violates any local ordinance or other local agency restriction. To the TAC and NSV Board's knowledge, all of the projects contained in this IRWMP are consistent with local planning efforts and if inconsistencies between the local planning efforts and the IRWMP emerge, the IRWMP will need to be revised to reflect the local plans unless the IRWMP is more up-to-date than the local plans.

5.5 RELATION TO LOCAL LAND USE PLANNING

As described in the IRWM Guidelines, the intent of the Relation to Land Use Planning Standard is to require an exchange of knowledge and expertise between land use and water resource managers; examine how RWMGs and land use planning agencies currently communicate; and identify how to improve planning efforts between the RWMGs and land use planning agencies.

One of the goals of the California Water Plan Update 2009 is to ensure water managers and land use planners make informed, collaborative water management decisions using effective coordination among all parties at the federal, State, and local levels, particularly with respect to the Resource Management Strategies described in Chapter 4 Resource Management Strategies.

Coordination between land use planners and water resource managers is required by State law for larger developments, as codified in SB 610 (requires Water Supply Assessment), SB 221 (requires certification of water supply), and SB 910 (added requirement to describe groundwater resources in UWMPs). For smaller developments, coordination is encouraged, but not codified. The purpose of this section is to describe the existing coordination between local land use planners and water resource managers and to describe future efforts to improve coordination and communications.

To determine the current relationship between local land use planners and water resource managers and future efforts to establish a proactive relationship between local land use planners and water resource managers, the local land use planners and water resource managers were interviewed. Top staff from the six counties and the four largest water suppliers (ACID, GCID, RD108, and TCCA) were interviewed. The results of the interviews are summarized below.

5.5.1 Current Relationship between Local Land Use Planners and Water Resource Managers

The current relationships between land use planners and water resource managers in general vary significantly depending on location and need. The general opinion seemed to be that relationships are strong, but coordination and communication could be improved.

The overall level of communication and interaction between local land use planners and water resource managers varies greatly from excellent to needing improvement. The land use planners and water resource managers in Sutter County work in the same building and reported strong working relationships. ACID, which spans areas in Shasta and Tehama Counties, and RD 108 in Colusa County both reported proactive communications with county staff. Other water suppliers indicated better coordination is needed.

As with the coordination among the counties, the current status of the coordination between the cities and the counties also ranges from excellent to needing improvement. Some cities do not have land use planners.

Regular forums where land use planners and water managers can meet and converse are also rare in the IRWM region. Some counties have regular Water Commission meetings and coordinating meetings regarding water conservation measures. In other areas, there are no regular forums between land use planners and water managers.

In general within in the IRWM region, land use decisions include consideration of water resources, especially for developments that require a water supply assessment. In some areas, non-agricultural development does not happen, and therefore there are no land use decisions to be made. GCID reported that an evaluation of available resources must be completed prior to authorizing any annexations into the GCID service area.

Although water resources decisions take land use planning into consideration more than land use planning takes water resources into consideration, the level of consideration varies according to location and need.

5.5.2 Future Efforts to Establish a Proactive Relationship between Local Land Use Planners and Water Resource Managers

In general, the interviewees indicated that better communications could be achieved and existing communication and coordination protocols could be improved. Budget constraints all across the IRWM region have severely cut into the amount of staffing and staff availability to attend forums. Any future effort to improve communication and coordination must keep these limitations in mind. The most effective effort is the increased awareness of the need to coordinate land use decisions and water resources management decisions between the various land use planners and water resource managers throughout the IRWM region. This increased awareness results from participation in this IRWMP.

The IRWMP process has been identified by one interviewee as a way to smooth the boundary issues and open communications throughout the IRWM region. Continued participation in the IRWM through implementation of the projects will foster this openness and lead to more proactive planning.

Figure 5-1
Process for Project Review and Prioritization

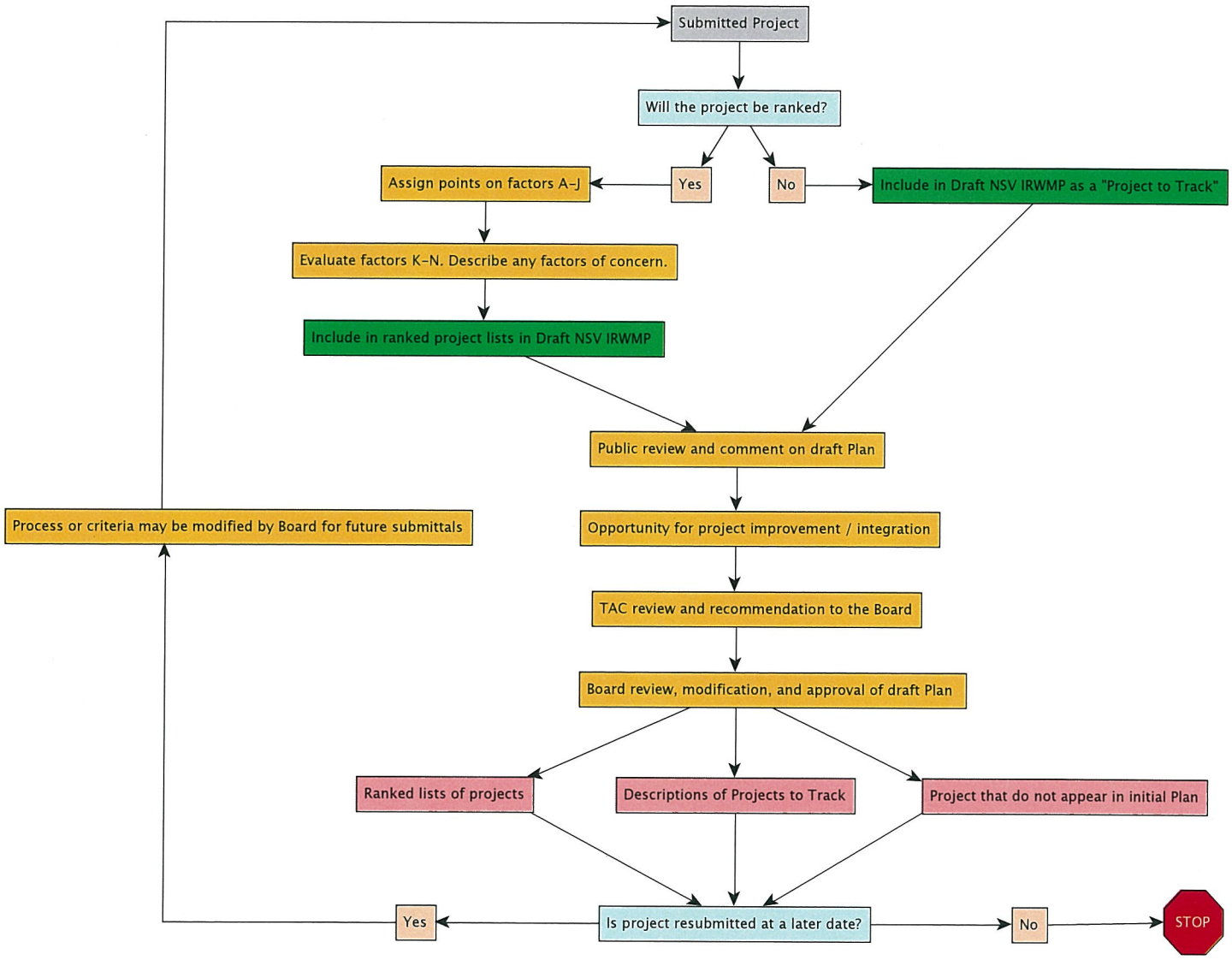

Figure 5-2. Scorecard

Northern Sacramento Valley Integrated Regional Water Management Plan Projects/Programs Scorecard

Factor	Criterion	Point value	Max points	Overall Weight of Factor	Point Assignment to Projects or Programs	Notes
A.i.	Number of NSV IRWMP objectives addressed	5 each per objective	30	24%		
A.ii.	Type of need addressed (highest scoring of primary or secondary objective)	Critical = 10 Foundational = 5 High = 3 Medium = 1	10	8%		A score is only given for one objective: the highest of the primary and secondary objectives.
B.i.	Addresses objectives under more than one goal	2 per additional goal area	8	6%		
B.ii.	Number of committed collaborative partners	Financial contributer = 3 each MOU/JPA = 2 each Letter of Support = 1 ea In-kind support = 2 ea	10	8%		A score is given in only one category for each partner. If a partner meets multiple categories, then the category with the highest point value is used for scoring. More than one partner can contribute points in each sub-category. "Partner" is defined as an Agency or organization (i.e. individuals do not count).
B.iii.	Benefits more than one NSV county	1 for each additional county above 1	5	4%		
C	Program phase	Concept =1 Feasibility =2 Planning =3 Env Doc =4 Permitting =5 Implementation =6 Maintenance =3 Monitoring =3	6	5%		Points are only be awarded for one project phase. If multiple phases are provided in a submittal, points will be based on the highest scoring phase.
D	Local matching funds	1-9% = 2 10-19% =4 20 - 29% =6 30 - 39% = 8 40 - 49% =10 50 - 59% =12 60 - 69% = 14 70 - 79% = 16 80% or more = 18	18	14%		The % of the the total project cost that comprises total local matching funds (in dollars). Local matching funds includes monetary cost-share contributions as well as in-kind/labor/other non-monetary contributions. Projects with 0% local matching funds will not receive points in this category.
E	Benefits a DAC	yes = 10	10	8%		
F	Benefits a Tribe	yes = 10	10	8%		
G	Economic feasibility analysis	Exists = 1 Satisfactory Project Benefit (B) to Project Cost (C) Ratio (if B:C is greater than 1) = 2	3	2%		
H	Number of statewide priorities addressed	1 each	7	6%		
I	Number of resource management strategies	1 each	7	6%		
J	Vulnerability, adaptation, mitigation of project to climate change	Project assesses vulnerability to CC = 1 Project adapts to CC = 1 Project mitigates against CC = 1	3	2%		
Total Points			**127**			

Tier List	Tier 1 (100-127 points)		
	Tier 2 (60-99 points)		
	Tier 3 (5-59 points)		If projects do not meet any of the NSV IRWMP objectives, then they will not be included in the Plan. Therefore, projects with 0-4 points will not be included in Tier 3).
Other Lists to Include in Plan:	Top projects by county Top projects by goal Top shovel-ready projects Top DAC projects Top Tribal projects		