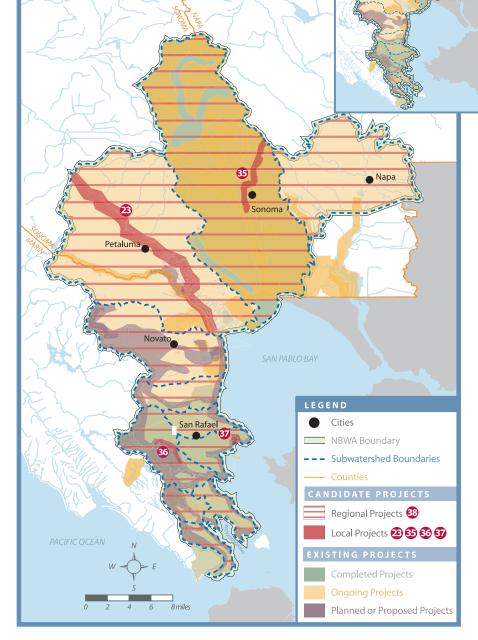
HE1: Support protection and contribute to restoration of diverse habitats for threatened or endangered species, and establish management practices to restore dominance of locally relevant native species and reduce non-native or invasive species.

## CANDIDATE PROJECTS

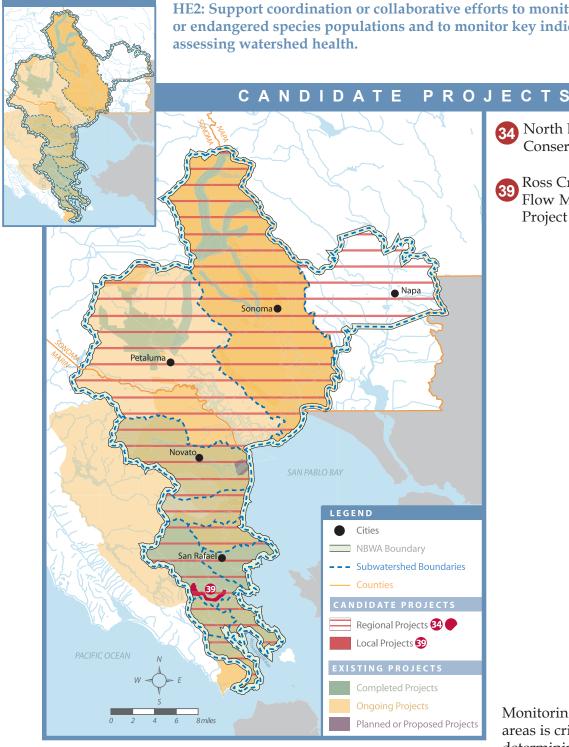
- Petaluma River Cleaning and Revegetation Project
- Nathanson Creek Restoration Program
- 36 San Anselmo Creek Assessment
- San Rafael
  Canalways
  Restoration Project
- Non-toxic Weed Control Method Evaluation



The North Bay Watershed region is actively engaged in many ongoing and planned or proposed habitat and species

restoration and management projects. NBWA can best support the objective of contributing to habitat restoration by supporting and helping to implement these existing proposed projects. Many of the candidate projects listed here are in need of funding or other types of support that NBWA could provide. Projects such as these require collaboration with member agencies, outside agencies and non-profit groups. Of particular importance, is further research on non-toxic environmentally-friendly methods for the reduction of invasive species.

**EXISTING PROJECTS** 



**EXISTING PROJECTS** 

HE2: Support coordination or collaborative efforts to monitor threatened or endangered species populations and to monitor key indicators for

North Bay Habitat Conservation Plan

Ross Creek Stream Flow Monitoring **Project** 

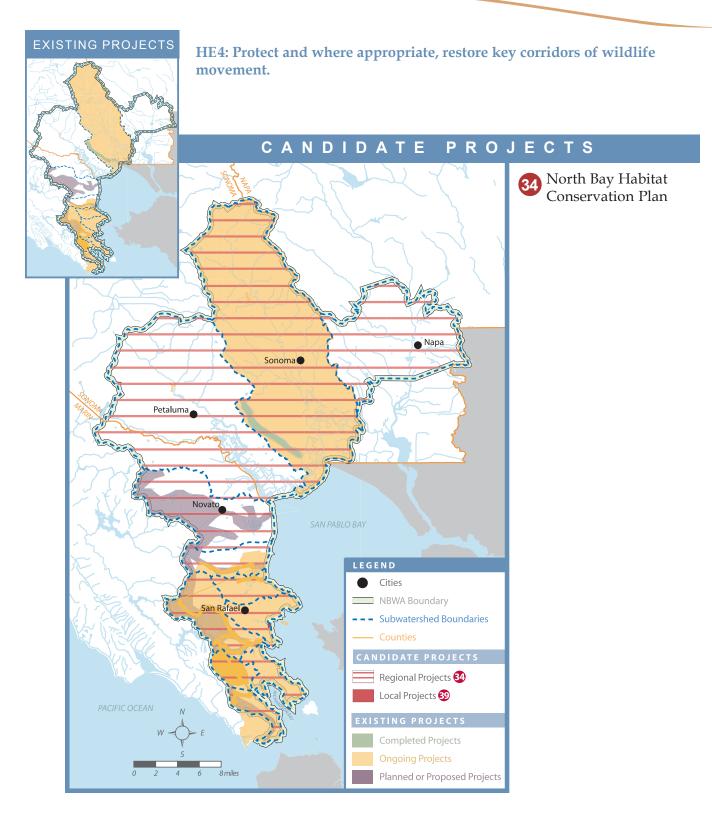
Monitoring of habitat areas is critical toward determining where to

effectively direct resources. A regional Habitat Conservation Plan would provide member agencies with regional priorities for habitat and species preservation. Many of NBWA's member agencies have examined developing such plans on a more local agency level, but could benefit from the collaboration as well as cost sharing affiliated with regional planning. Local projects such the Ross Creek Stream Flow Monitoring Program could also be supported to offer more immediate monitoring implementation.

**EXISTING PROJECTS** HE3: Protect and enhance buffers along riparian corridors including those along intermittent streams. CANDIDATE PROJECTS North Bay Habitat Conservation Plan Sonoma Petaluma LEGEND Cities NBWA Boundary Subwatershed Boundaries Regional Projects 🥸 **Completed Projects** 

The habitat in riparian areas is critical to the health of watershed systems. The protection of these areas has been a prime focus for many existing subwatershed and environmental groups as well as NBWA agencies. While a great deal of work has been completed on a local level along many of these corridors, a regional perspective is still needed to bring these efforts together and capture those corridors that are not currently being monitored or protected. A regional North Bay Habitat Conservation Plan would fill the need for this type of perspective.

Planned or Proposed Projects



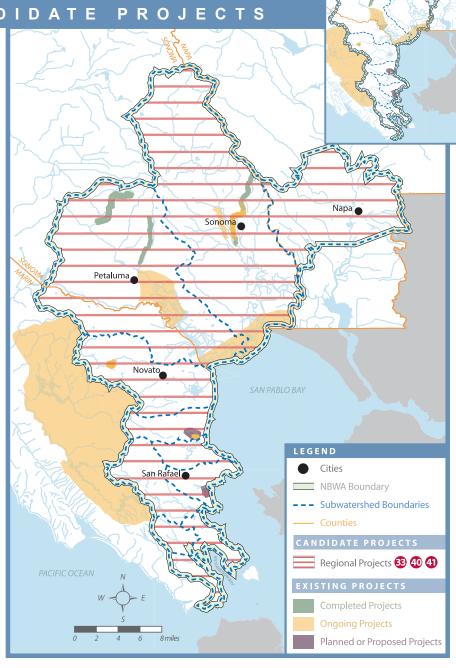
As urban areas continue to expand in the North Bay, natural habitat areas are decreased and separated. Maintaining wildlife movement corridors ensures that existing wildlife will be able to travel around the watershed area without becoming isolated in smaller areas. NBWA can provide the regional linkages or corridors between these habitat areas by working with its member agencies in concert with land agencies and private owners. Corridors in need of protection can be first determined as part of the proposed North Bay Habitat Conservation Plan.

REC1: Promote expansion and connectivity of local and regional trail systems where compatible with the outlined resource goals and objectives.

### CANDIDATE PROJECTS

- Erosion/Sediment Control Demonstration Project
- North Bay Watershed Existing Trails Survey
- Trail Enhancement Program

The objective to expand and increase connectivity of trail systems can be accomplished through NBWA member agencies working with various land owners, including government agencies. Trails

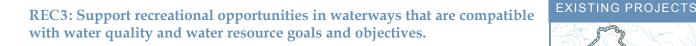


often cross jurisdictional boundaries and therefore are best assessed on a regional or watershed level. The North Bay Watershed Existing Trails Survey would coordinate with local agencies to compile surveys on trails within the watershed area and to identify potential areas for improvement. The Trail Enhancement Program would create a North Bay Trail Master Plan based on the survey and would assist existing projects in need of funding or completion. Work completed from an erosion and sediment demonstration program could also contribute toward a healthier trail system.

**EXISTING PROJECTS** 



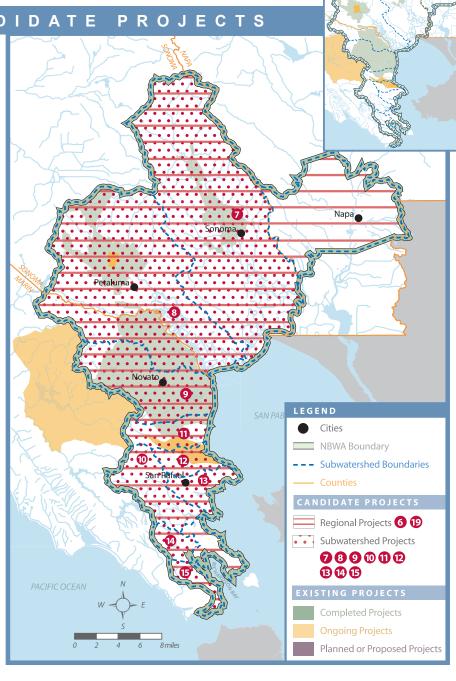
Providing educational resources along watershed trails can directly engage the public in sound stewardship activities. Through support of proposed projects such as the Ross Creek Stream Flow Monitoring Project, NBWA can work with local agencies to monitor or increase flows from Phoenix Lake to Ross Creek to ensure steelhead population is preserved. The regional trail enhancement program would also include individual efforts where interpretive features along trails could be increased.



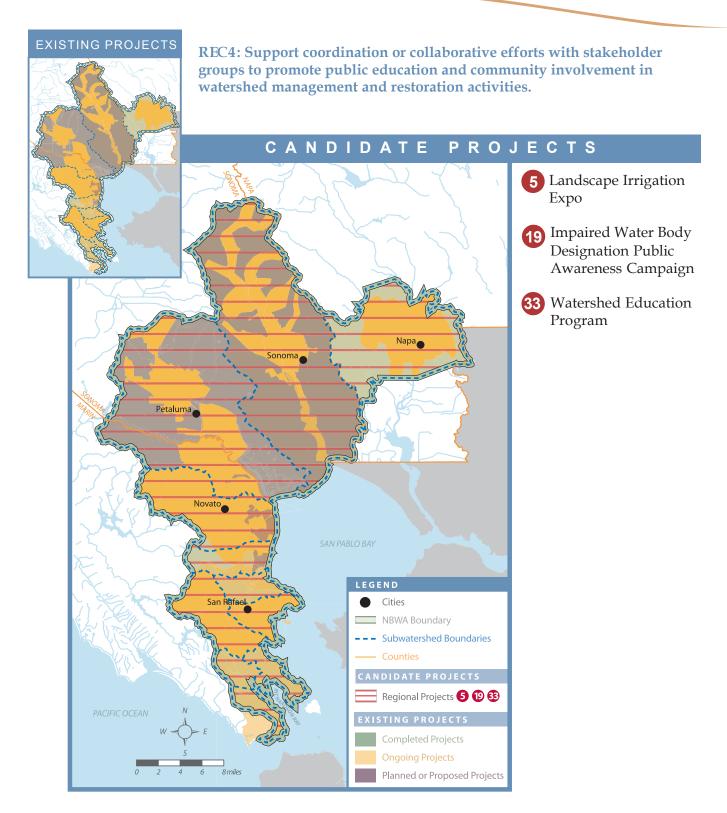
### CANDIDATE PROJECTS

- Petaluma River Monitoring Project
- Novato Creek Monitoring Project
- Corte Madera Creek Monitoring Project
- Miller Creek Monitoring Project
- Gallinas Creek Monitoring Project
- San Rafael Creek Monitoring Project
- Arroyo Corte Madera del Presidio/Mill Valley Creek Monitoring Project
- Sausalito Area Creeks Monitoring **Project**
- Impaired Water **Body Designation** Public Awareness Campaign

Promoting recreational opportunities with sound watershed and water supply



management is a delicate balance. As such, careful monitoring of water supplies is critical on a local level to determine if recreational activities are impacting water quality. The proposed NBWA subwatershed monitoring projects would make sure to monitor for the potential pollutants and other concerns often associated with water based recreational activities. NBWA can serve to coordinate these monitoring procedures that will allow recreational opportunities to be safely explored as well as educate the public on the causes and effects of impaired water bodies in the region.



Educating the recreational public on the pollutants that cause impaired water bodies and activities that can be done to limit these pollutants from entering the water system is also an important part of balancing recreational enjoyment and water quality demands. Conservation through water wise irrigation practices is another area where public education can be very effective. While NBWA and its member agencies work consistently to provide the best stewardship to the North Bay Watershed, it requires public support and understanding of these efforts to make them truly effective.

**EXISTING PROJECTS** REC5: Supports efforts to promote educational opportunities related to cultural and historic resources. CANDIDATE PROJECTS North Bay Watershed Existing Trails Survey Trail Enhancement Program Sonoma Petaluma LEGEND Cities ■ NBWA Boundary **- - -** Subwatershed Boundaries Regional Projects 40 41 Completed Projects

NBWA not only can serve to educate on the natural resources within the North Bay Watershed but also its many cultural and historical resources. These resources, when combined in natural settings, create a whole picture of life in the North Bay and can easily be integrated into the interpretive features to be planned along trail systems through both the proposed NBWA trail survey and enhancement program.

Planned or Proposed Projects



**EXISTING PROJECTS** 

REC 6: Promote research projects related to watershed resources.

Treatment Wetland
Cooperative Research
Project

While developing programs and implementing projects provides direct and tangible results toward meeting watershed goals and objectives, promoting watershed research helps to provide efficient stewardship practices for the future. Of specific relevance to NBWA's

member agencies, are research projects that will contribute to the greater understanding of integrated water supply and quality maintenance options such as treatment wetlands. Treatment wetlands provide an environmentally beneficial method for improving water quality while offering options to wastewater agencies. Research regarding the effectiveness of various wetland designs as well as the level to which potential pollutants can be eliminated is still growing and would benefit from regional collaborative efforts that can be offered through associations such as NBWA.

# 6. NEXT STEPS: PHASE 3

## 6.1 PROJECT PRIORITIZATION

The purpose of the WSP process is to determine the best projects and programs for implementation by NBWA. In order to complete this process the candidate projects developed as part of the Phase 2 process must be prioritized. Those projects that are found to be the highest priority can then be further developed through the refinement of an implementation scope and budget. This prioritization step is the main component of Phase 3 of the WSP process. Also included in Phase 3 is the development of an implementation plan which would determine appropriate funding opportunities outside of NBWA for these projects. The process by which projects are prioritized should be determined from the requirements for the desired sources of funding.

### 6.2 IMPLEMENTATION STRATEGIES

An implementation schedule will be developed to address the timing of phases related to each project. In addition to project sequencing, this phase of the WSP will define responsible agencies, environmental permitting, and allocation of costs to participating agencies proportional to projected benefits. This effort will establish performance indicators for each project, and adaptive management steps needed to modify projects to ensure that resource objectives are ultimately met.

## 6.3 PROJECT FUNDING

Regional and integrated projects are becoming increasingly favored by funding agencies as a way to get agencies to work together to meet the needs and priorities of their region.

Programs such as the State of California's Proposition 50, Chapter 8: Integrated Regional Water Management Plan (IRWMP) Grant Program is an example of this trend. Currently, several Bay Area agencies are coordinating an effort to produce a greater Bay Area IRWMP that will be comprised of four main sections including Water Supply/Water Quality,

Wastewater/ Recycled Water, Flood Protection and Stormwater, and Watershed Management. Like the IRWMP frame work, the **NBWA WSP** integrates all of these components on a regional level and is in keeping with many of the more specific guidelines and



standards of the IRWMP program. As such, the WSP could provide a strong basis for a functional equivalent to an individual North Bay IRWMP or as a supporting document to a larger Bay Area effort.

Currently, at the close of Phase 2, two Executive Summaries have been completed along with the development of a GIS database. Continuation of the WSP process into Phase 3 will be required to complete the planning process, including the development of a stand alone WSP document. Such a document, could be developed to meet the needs of NBWA and/or used as the basis for similar documents required by funding programs such as the IRWMP. Cooperation with other regional efforts, such as the Greater San Pablo Bay Restoration Program, would also enhance some areas of the WSP and could open the door for a coordinated effort to tap into other funding sources such as the United States Army Corps of Engineers.

What is imperative, is that the NBWA WSP database be continually updated and allowed to grow into an even more dynamic and powerful tool for assessing watershed activities in the North Bay as well as planning future projects that will allow the overall goal of a healthier watershed to be achieved.

