

## 6.1 MONITORING PERFORMANCE

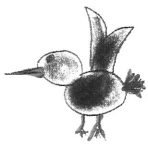
Monitoring the performance of the action plans in achieving the Morro Bay National Estuary Program (MBNEP) goals is essential to the long-term success of the program. This chapter describes how the MBNEP will measure the effectiveness and monitor the status of actions implemented under the CCMP. The information in this chapter is an expansion of the evaluation information provided in Chapter 4 for each action.

In order to assess the success of various actions, evaluation methods have been established. In addition, the MBNEP will monitor actions against priority problems to measure success at meeting the program goals (e.g., reduced sediment loading). The Environmental Monitoring Plan (discussed in Chapter 5) identifies measures for determining whether water and habitat quality objectives and MBNEP goals are being met. Tables 6.1 through 6.9 summarize how actions will be evaluated.

## 6.2 EVALUATING PROGRESS

Participants in the MBNEP recognize that the value of monitoring lies in the ability to communicate meaningful results to appropriate managers and the public. The MBNEP will regularly assess progress towards completing the action plans contained in the CCMP.

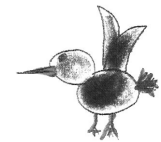
To better organize and track accomplishments, the MBNEP will develop an implementation tracking system (ITS) that will be available on the MBNEP webpage. The MBNEP will use an approach similar to the San Francisco Bay Estuary Project to document progress towards implementing the CCMP and report results in a consistent manner. Table 6.10 provides an up-to-date progress report on implementing CCMP actions.



**Table 6.1 Cross Cutting Action Plan Objectives and Evaluation Methods\***

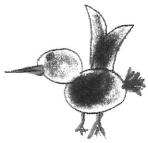
Action Plan	Programmatic Objectives	Environmental Objectives
<b>CC-1 Habitat Acquisition</b>	<ul style="list-style-type: none"> <li>▪ Establishment of a habitat acquisition committee</li> <li>▪ Habitat selection &amp; recommendations identified</li> <li>▪ Acres of land purchased &amp; put into easement</li> <li>▪ Prioritized list of habitat acquisition opportunities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved and/or maintained high habitat and water quality (suspended sediment, bed load; turbidity; stream profiles and vegetation cover)</li> <li>▪ Buffered non-point source runoff</li> </ul>
<b>CC-2 Drainage</b>	<ul style="list-style-type: none"> <li>▪ Number of projects implemented</li> <li>▪ Acreage of wetland habitat created</li> <li>▪ Community wide drainage plan</li> <li>▪ Reduced frequency of structure and road flooding in Los Osos</li> <li>▪ Increased volume of stormwater detention/retention</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pre &amp; Post project monitoring using automatic samplers to determine pollutant load reduction</li> <li>▪ Pre &amp; Post Photo or video documentation, especially during storm events</li> </ul>
<b>CC-3 TMDLs</b>	<ul style="list-style-type: none"> <li>▪ Develop technical components of TMDL (water quality attainment strategy)</li> <li>▪ Complete TMDL Implementation and Monitoring Plan</li> <li>▪ Implement Plans</li> <li>▪ Acreage of marine to terrestrial habitat alteration</li> </ul>	<ul style="list-style-type: none"> <li>▪ Will be based upon CCRWQCB's TMDL monitoring plan and Numerical Targets</li> <li>▪ Removal of water bodies from the 303(d) listing or documented improvements to water quality</li> </ul>
<b>CC-4 Urban Runoff</b>	<ul style="list-style-type: none"> <li>▪ Number of BMP's installed and maintained</li> <li>▪ Annual reports for permit compliance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Trends in water quality above and below storm drain filters</li> <li>▪ Pre &amp; Post project monitoring using automatic samplers to determine pollutant load reduction</li> </ul>
<b>CC-5 Stream geomorphology and water quality for steelhead</b>	<ul style="list-style-type: none"> <li>▪ Number of projects implemented</li> <li>▪ Periodic channel typing evaluations</li> <li>▪ Periodic Riparian corridor mapping and GIS update</li> <li>▪ ID maintenance and restoration efforts at areas of critical habitat and stability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measurable improvements in water quality and habitat over time (VMP)</li> <li>▪ Use Rapid bio-assessment protocols to measure improvements to species diversity and stream ecology</li> <li>▪ % increase in critical habitat types</li> <li>▪ Stream cross sections and profiles</li> <li>▪ Changes in stream classifications to more stable types</li> </ul>
<b>CC-6 Volunteer Monitoring Program</b>	<ul style="list-style-type: none"> <li>▪ Participation in the VMP</li> <li>▪ Annual VMP status reports</li> <li>▪ Public survey polls showing changes in knowledge of local issues</li> <li>▪ Collection of additional data to fill in data gaps</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental Monitoring is not applicable for this action</li> </ul>
<b>CC-7 Watershed Crew</b>	<ul style="list-style-type: none"> <li>▪ Feedback from project sponsors on the Quality and Quantity of work products completed</li> <li>▪ Number of projects completed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental Monitoring is not applicable for this action</li> </ul>

\*Overall objective is to meet state water quality standards for sediment, bacteria, nutrients, heavy metals and other toxic substances



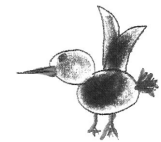
**Table 6.2 Sediment Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives
<b>SED-1 Road Management</b>	<ul style="list-style-type: none"> <li>▪ Inventory of roads and identification of problem areas</li> <li>▪ Numbers of maintenance and construction measures implemented</li> <li>▪ Training for maintenance crews and landowners</li> <li>▪ Incorporate management measures into city, county, and state practices</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measured reduction in sediment (suspended sediment, turbidity) from roadways and in drainage areas to waterbodies</li> </ul>
<b>SED-2 Sediment Traps</b>	<ul style="list-style-type: none"> <li>▪ Numbers of sediment traps (i.e. flood plain restoration projects, sediment ponds, filter strips) installed</li> <li>▪ Number of projects completed</li> <li>▪ Number of sediment traps used in road networks</li> <li>▪ Feasibility study of Warden Lake</li> <li>▪ Increase in land owners using sediment traps on their property</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measured habitat improvements</li> <li>▪ Measured reduction in sediment (suspended sediment, bed load; turbidity) at upstream and downstream sites following implementation</li> <li>▪ NMP and VMP water quality data as a pre-post project comparison</li> <li>▪ Measurements of sediment trapped in specific structures</li> </ul>
<b>SED-3 Fire Management</b>	<ul style="list-style-type: none"> <li>▪ Watershed Fire Management Plan completed</li> <li>▪ Annual Report documenting projects completed</li> <li>▪ Evaluation of the effects to sensitive species, habitats, air quality, and impacts of an escaped fire conducted</li> <li>▪ Action Plan Implementation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Vegetation analysis of age class conducted using transect data, mapping, and GIS overlays</li> <li>▪ Estimated reduction in sediment loading to the bay during peak flows</li> </ul>
<b>SED-4 Landowner BMPs</b>	<ul style="list-style-type: none"> <li>▪ Numbers and acres of BMPs installed</li> <li>▪ Number of landowners provided with opportunities for technical assistance and funding</li> </ul>	<ul style="list-style-type: none"> <li>▪ NMP data on project effectiveness</li> <li>▪ Estimates of sediment captured</li> <li>▪ Measured reduction in suspended sediment and turbidity at downstream sites following implementation</li> <li>▪ Estimates of erosion prevented (RUSLE or WEPP)</li> </ul>
<b>SED-5 Creek Restoration Projects</b>	<ul style="list-style-type: none"> <li>▪ Numbers and acres of BMPs installed</li> <li>▪ Technical assistance and funding provided to landowners</li> <li>▪ Miles of stream restored</li> </ul>	<ul style="list-style-type: none"> <li>▪ Entire system evaluated for upstream effects</li> <li>▪ NMP data on project effectiveness</li> <li>▪ Estimates of erosion prevented and/or sediment captured</li> <li>▪ Measured reduction in suspended sediment and turbidity at downstream sites following implementation</li> <li>▪ Improved and/or maintained habitat at BMP sites</li> <li>▪ Specific Monitoring Plans will be developed with each project to determine environmental effectiveness such as:               <ul style="list-style-type: none"> <li>▪ Pre &amp; post photo or video documentation</li> <li>▪ Changes in stream classification to more stable types</li> </ul> </li> <li>▪ Improvements to riparian habitat quantity &amp; diversity</li> </ul>



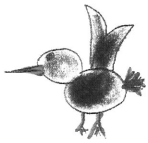
**Chapter 6**

Action Plan	Programmatic Evaluation	Environmental Objectives
		<ul style="list-style-type: none"> <li>▪ Vegetation transects to document revegetation efforts</li> <li>▪ Cross sections and long profiles to document streambed and stream bank adjustments</li> </ul>
<p><b>SED-6 Sandspit Revegetation</b></p>	<ul style="list-style-type: none"> <li>▪ ESH designation</li> <li>▪ Number of revegetation projects implemented</li> <li>▪ Number of acres of land revegetated</li> <li>▪ State acquisition of privately owned sandspit areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved and/or maintained high quality habitat through transects and GIS/aerial overlays</li> <li>▪ Measured reduction in sand delivered to Morro Bay estuary from sandspit using air photo documentation</li> </ul>
<p><b>SED-7 BMP Incentives for Landowners</b></p>	<ul style="list-style-type: none"> <li>▪ Development of incentives</li> <li>▪ Number of incentive programs and users</li> <li>▪ Provide WQ monitoring kits and training to landowners for self monitoring evaluations</li> <li>▪ Implementation/adoption of streamlined permit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced sediment loading to receiving waters</li> <li>▪ Photo or video documentation of BMP effectiveness during storm events</li> </ul>
<p><b>SED-8 Estuary Restoration Project</b></p>	<ul style="list-style-type: none"> <li>▪ Local sponsors and contracting entities are selected for the ACOE feasibility study</li> <li>▪ Implementation of projects</li> <li>▪ Reduced harbor maintenance for navigation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring will be developed as part of the project planning and implementation phases</li> <li>▪ Measurable improvements to the hydrodynamics and tidal prism of the bay</li> </ul>



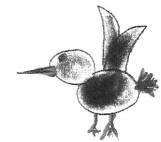
**Table 6.3 Bacteria Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Evaluation	Environmental Objectives
<b>BACT-1 Grazing Management</b>	<ul style="list-style-type: none"> <li>▪ Number of ranches implementing management Measures</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduction in fecal coliform % levels using a pre/post or an upstream/downstream study design, targets based off proven Morro Bay Watershed BMP's</li> <li>▪ Vegetation transects demonstrating riparian vegetation improvements</li> <li>▪ Use air/satellite photos to document increases in numbers of acres of riparian habitat</li> </ul>
<b>BACT-2 Pump-outs</b>	<ul style="list-style-type: none"> <li>▪ Number of Boater's Guides distributed</li> <li>▪ Survey Boaters to determine usage of pump-out facilities and how to improve them</li> <li>▪ Use meters to measure number of gallons of sewage pumped-out</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decrease in fecal coliform at high use areas using pre/post-monitoring design to meet state water quality standards.</li> </ul>
<b>BACT-3 Illegal Moorings</b>	<ul style="list-style-type: none"> <li>▪ Number of illegal moorings removed</li> <li>▪ Inventory and map locations of existing buoys, and track changes over time</li> <li>▪ Create temporary mooring facility at CDPR Marina</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental Monitoring is not applicable for this action</li> </ul>
<b>BACT-4 Abandoned Boats</b>	<ul style="list-style-type: none"> <li>▪ Number of boats removed</li> <li>▪ Inventory and map locations of existing boats, and track changes over time</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental Monitoring is not applicable for this action</li> </ul>
<b>BACT-5 Liveboard Boats</b>	<ul style="list-style-type: none"> <li>▪ Survey boaters to determine usage of pump-out facilities</li> <li>▪ Use meters to measure number of gallons of sewage pumped-out at pump-out facilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decrease in fecal coliform at high use areas using pre/post monitoring design to meet state water quality standards</li> </ul>
<b>BACT-6 Biofiltration</b>	<ul style="list-style-type: none"> <li>▪ Final Project Report</li> </ul>	<ul style="list-style-type: none"> <li>▪ Statistical analysis of bacterial and chlorophyll data from the oyster tank and the control tank</li> </ul>
<b>BACT-7 Bird Deterrents</b>	<ul style="list-style-type: none"> <li>▪ Evaluate pre &amp; post avian activity</li> </ul>	<ul style="list-style-type: none"> <li>▪ DNA study results</li> <li>▪ Document bird use pre &amp; post project</li> </ul>
<b>BACT-8 Pet Waste</b>	<ul style="list-style-type: none"> <li>▪ Establishment of an off-leash dog park</li> <li>▪ Number of people using the pet waste system</li> <li>▪ Number of dispensers installed and maintained</li> <li>▪ Public acceptance poll</li> </ul>	<ul style="list-style-type: none"> <li>▪ DNA study results</li> <li>▪ Overall reduction in fecal coliform loads in storm water to meet state water quality standards (based on TMDL)</li> </ul>
<b>BACT-9 Water Quality Standards</b>	<ul style="list-style-type: none"> <li>▪ Document resources saved by sharing data, and revising monitoring guidelines and requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>



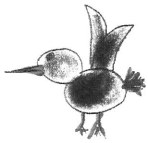
**Table 6.4 Nutrient Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives
<b>NUTR-1 Los Osos Wastewater</b>	<ul style="list-style-type: none"> <li>▪ Document progress on wastewater treatment facility planning and implementation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved quality of groundwater and freshwater seeps</li> <li>▪ Reduction in nutrient loads from freshwater seeps using pre/post flow weighted sampling, based on percentage</li> </ul>
<b>NUTR-2 CMC Wastewater</b>	<ul style="list-style-type: none"> <li>▪ Compliance with monitoring requirements</li> <li>▪ Revise treatment level and methods</li> </ul>	<ul style="list-style-type: none"> <li>▪ Collection and analysis of effluent samples, receiving surface waters, and groundwater</li> </ul>
<b>NUTR-3 Agricultural BMPs</b>	<ul style="list-style-type: none"> <li>▪ Number of farms implementing mgt. Practices</li> <li>▪ Provide WQ monitoring kits and training to landowners for self monitoring evaluations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduction in nutrient levels using a pre/post or upstream/downstream study design, targets are based upon proven Morro Bay Watershed BMP's, as measured in percentage</li> </ul>
<b>NUTR-4 Residential BMPs</b>	<ul style="list-style-type: none"> <li>▪ Number of BMP's installed and maintained</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improvement in stormwater runoff quality at sites where BMP's have been installed, based on percentage</li> <li>▪ Pre &amp; post project monitoring using automatic samplers to determine pollutant load reduction</li> </ul>



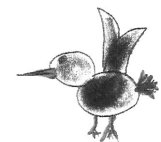
**Table 6.5 Freshwater Flow Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives Evaluation
<b>FLOW-1 CMB Wastewater Treatment Plant</b>	<ul style="list-style-type: none"> <li>▪ Construction of new treatment plant</li> <li>▪ Reporting of discharge flows into Chorro Creek</li> </ul>	<ul style="list-style-type: none"> <li>▪ Quantify upstream and downstream flows and effluent at discharge site to determine changes</li> </ul>
<b>FLOW-2 Chorro Valley Water Users Workgroup</b>	<ul style="list-style-type: none"> <li>▪ Convene Workgroup</li> <li>▪ New agreements to maintain minimum flows of 1.5 cubic feet/second</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitor upstream and downstream flow from the site</li> </ul>
<b>FLOW-3 Water Conservation</b>	<ul style="list-style-type: none"> <li>▪ Development of a water conservation program in conjunction with all water users and purveyors</li> <li>▪ Reduced water demand</li> </ul>	<ul style="list-style-type: none"> <li>▪ Measurable increases in streamflow or groundwater elevations near water supply wells, as measured in cf and depth of water in wells</li> </ul>
<b>FLOW-4 Wastewater Treatment Plant Releases</b>	<ul style="list-style-type: none"> <li>▪ MBNEP will evaluate the flow monitoring requirements contained in the agreements for adherence to minimum flow requirements</li> <li>▪ CCRWQCB will evaluate compliance with NPDES permit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monitor upstream and downstream flow from the site</li> <li>▪ City of Morro Bay well level and stream flow monitoring will be assessed for maintenance of groundwater levels and instream flow levels</li> </ul>



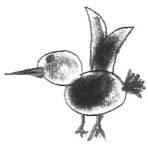
**Table 6.6 Heavy Metals & Toxics Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives
<b>HMT-1 Mine Remediation</b>	<ul style="list-style-type: none"> <li>▪ Restoration of natural habitat along the creek</li> <li>▪ Number of reclaimed mines</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduction of heavy metal loadings from Chorro Creek watershed, will be based upon CCRWQB's TMDL target, as measured in percentage</li> </ul>
<b>HMT-2 Marina BMPs</b>	<ul style="list-style-type: none"> <li>▪ Number of demonstration projects</li> <li>▪ Number of educational materials distributed</li> <li>▪ Wash-water filtration system usage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improvement in stormwater runoff quality, as measured in percentage</li> <li>▪ Pre &amp; post bay water and/or sediment quality samples</li> </ul>
<b>HMT-3 Boat Haul Out</b>	<ul style="list-style-type: none"> <li>▪ Number of local boats using haul-out facilities</li> <li>▪ Quantity of pollutants diverted to hazardous waste facilities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decrease of boat yard related pollutants in high use areas using pre/post monitoring, as measured in percentage</li> </ul>
<b>HMT-4 Hazardous Waste Network</b>	<ul style="list-style-type: none"> <li>▪ Tons of haz. waste delivered to the facilities</li> <li>▪ Number of boats serviced and gallons of bilge water processed</li> <li>▪ Number of facilities established</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pre &amp; post bay water and/or sediment quality samples</li> </ul>



**Table 6.7 Habitat Action Plan Objectives and Evaluation Methods**

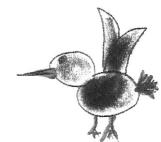
Action Plan	Programmatic Objectives	Environmental Objectives
<b>HAB-1 Overlay Maps</b>	<ul style="list-style-type: none"> <li>▪ Identify acres of critical habitat</li> <li>▪ Develop overlays</li> <li>▪ Annual change (in acres) by habitat</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase or stabilization of critical habitats.</li> </ul>
<b>HAB-2 Upland Habitats</b>	<ul style="list-style-type: none"> <li>▪ Committee establishment</li> <li>▪ ID and report upland habitats to the community</li> <li>▪ Develop management measures for the protection of habitat</li> <li>▪ Establishment of protection measures for upland habitat</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase or stabilization of trends quantified by community diversity transects at given upland habitats</li> </ul>
<b>HAB-3 Mapping</b>	<ul style="list-style-type: none"> <li>▪ Completed maps of pre-1850 conditions</li> <li>▪ Completed maps of current habitats</li> <li>▪ Quantified % change of wetland and riparian habitats</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>HAB-4 Species Recovery Plans</b>	<ul style="list-style-type: none"> <li>▪ Implementation of actions in recovery plans</li> <li>▪ Criteria for evaluating the successful implementation of the objectives should be established by the working group</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase or stabilization of endangered species in vegetation or animal surveys</li> </ul>
<b>HAB-5 Beneficial Dredging</b>	<ul style="list-style-type: none"> <li>▪ Number of acres of habitat protected and restored</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase in eelgrass density using transects number of eelgrass plants per square meter</li> <li>▪ Decrease in turbidity levels in eelgrass habitat using sechi disk or other measuring techniques.</li> <li>▪ Increase in eelgrass productivity after dredging events</li> </ul>
<b>HAB-6 Riparian Vegetation</b>	<ul style="list-style-type: none"> <li>▪ Annual reports from implementing agencies and projects</li> <li>▪ Workshops</li> <li>▪ Ongoing wildlife/water quality monitoring on a portion of a treated stream</li> <li>▪ Improved health /abundance of wetlands</li> </ul>	<ul style="list-style-type: none"> <li>▪ Air/satellite photos quantifying increases in wetland and riparian habitat</li> <li>▪ Vegetation transects quantifying expansion of wetland and riparian habitat</li> </ul>
<b>HAB-7 Riparian and Wetland Policies</b>	<ul style="list-style-type: none"> <li>▪ ID areas subject to new policies</li> <li>▪ Increased protection of coastal streams, wetlands, and sensitive habitats due to new policies</li> <li>▪ # of new protection programs and policies</li> </ul>	<ul style="list-style-type: none"> <li>▪ Air/satellite photos quantifying increases in wetland and riparian habitat</li> <li>▪ Vegetation transects quantifying expansion of wetland and riparian habitat</li> </ul>



Action Plan	Programmatic Objectives	Environmental Objectives
<b>HAB-8 Eelgrass</b>		<ul style="list-style-type: none"> <li>▪ % Change in acreage of eelgrass habitat, as a measure in percentage increase or decrease.</li> <li>▪ Monitor eelgrass for bed width, shoot density, and turbidity</li> </ul>
<b>HAB-9 Exotic Species</b>	<ul style="list-style-type: none"> <li>▪ Establishment of a Weed Mgt. Committee</li> <li>▪ No new introductions of exotic species</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduced acreage of existing exotic species</li> </ul>
<b>HAB-10 <i>A. donax</i> Removal</b>	<ul style="list-style-type: none"> <li>▪ Number and location of stands of <i>A. donax</i> before and after control treatment</li> <li>▪ 3rd year comparisons of data depicting occurrence of individual stands of <i>A. donax</i> within the Chorro Creek watershed before and after control treatment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Vegetation surveys in riparian communities</li> </ul>

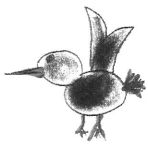
**Table 6.8 Steelhead Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives
<b>STL-1 Recovery Plan</b>	<ul style="list-style-type: none"> <li>▪ Successful attainment of the USNMFS Recovery Plan (% increase in population, % increase in habitat?)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>STL-2 Habitat Access</b>	<ul style="list-style-type: none"> <li>▪ Miles of stream accessible to steelhead</li> <li>▪ Number of barriers removed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Photo or video documentation</li> <li>▪ Habitat typing evaluations</li> <li>▪ Depth of water at critical riffle areas</li> <li>▪ Surface area and depth of critical rearing and smolting habitat</li> </ul>
<b>STL-3 Pool/Riffle Structure</b>	<ul style="list-style-type: none"> <li>▪ Mileage of stream habitat evaluated</li> <li>▪ Habitat scoring over time</li> <li>▪ Number of individuals trained in appropriate instream habitat maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Habitat typing evaluations</li> </ul>
<b>STL-4 Riparian Corridors</b>	<ul style="list-style-type: none"> <li>▪ Miles of riparian corridor fenced</li> <li>▪ Miles of levee removed</li> <li>▪ Stream channel profile measurements</li> <li>▪ Riparian shading measurements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Changes to benthic invertebrate composition</li> <li>▪ % Increase in riparian vegetation acreage, as measured in percent quantity.</li> </ul>



**Table 6.9 Education Action Plan Objectives and Evaluation Methods**

Action Plan	Programmatic Objectives	Environmental Objectives
<b>EDU-1 General Public Education &amp; Outreach</b>	<ul style="list-style-type: none"> <li>▪ Significant changes in the public's understanding of local issues</li> <li>▪ Attendance at forums and public displays</li> <li>▪ Screened nonpoint source runoff from urban areas</li> <li>▪ Number of public forums held and attendance rates</li> <li>▪ Number of educational displays exhibited in the community</li> <li>▪ Number of storm drains stenciled in urban areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-2 Boater Outreach</b>	<ul style="list-style-type: none"> <li>▪ Number of boater's Guides distributed</li> <li>▪ Increased use of pump-out facilities</li> <li>▪ Results of surveys</li> <li>▪ Feedback through periodic roundtable forums</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-3 Agricultural Outreach</b>	<ul style="list-style-type: none"> <li>▪ Attendance at workshops and feedback via written comments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduction in bacteria and nutrient loads in the creeks (VMP), as measured by percentage</li> </ul>
<b>EDU-4 Pesticide Workshops</b>		<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-5 Estuary Conference</b>	<ul style="list-style-type: none"> <li>▪ Conference attendance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-6 CCNHA Exhibit</b>	<ul style="list-style-type: none"> <li>▪ Number of system "sign-ons" per year</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-7 Media</b>	<ul style="list-style-type: none"> <li>▪ Number of press releases, articles, sound bites, newsletters published, lectures given, etc.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-8 Public Access</b>	<ul style="list-style-type: none"> <li>▪ Number of trash cans installed</li> <li>▪ Improved small craft launch ramp</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-9 K-12</b>	<ul style="list-style-type: none"> <li>▪ Attendance at special workshops</li> <li>▪ Attendance at after school projects</li> <li>▪ Number of educational guides used within five years of distribution</li> <li>▪ ID educational goals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-10 Mini-Grants</b>	<ul style="list-style-type: none"> <li>▪ Number of grants disbursed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>
<b>EDU-11 CEQA Checklist</b>	<ul style="list-style-type: none"> <li>▪ Timely adoption of new CEQA checklist by City and County</li> </ul>	<ul style="list-style-type: none"> <li>▪ Environmental monitoring is not applicable for this action</li> </ul>



**Table 6.10 Implementation Tracking System (ITS)  
Current Implementation Status**

<b>CCMP ACTION</b>	<b>Government &amp; Private Initiatives</b> (Public, private and cooperative programs)	<b>Examples of specific local completed or in progress projects</b>	<b>Current Gaps &amp; Roadblocks</b>	<b>Total % Complete of the Action</b> (Estimate)
<b>CC-1 Land Acquisition</b> (Related HAB – 1.3.5; STL – 2,4)	Trust for Public Lands, MEGA, and MBNEP partnership	<ul style="list-style-type: none"> <li>Acquisition of 15 acre coastal dune scrub parcel (in progress)</li> </ul>	Priorities among parcels; willing sellers; land costs	5%
<b>CC-6 Volunteer Monitoring Program</b>	Multi-agency participation, Friends of the Estuary grant proposal submitted	<ul style="list-style-type: none"> <li>Volunteer Monitoring Program (APDP in progress since 1995)</li> </ul>	Maintain volunteer participation. Expand monitoring program	75%
<b>SED – 7 BMP Incentives</b> (Related: EDU – 3)	Cooperation of permitting agencies, participation of landowners in short courses.	<ul style="list-style-type: none"> <li>Sustainable Conservation Permit streamlining project (APDP in progress)</li> </ul>	Time needed for agency reviews.	60%
<b>BACT –1 Grazing Management</b>	Multi-agency and landowner coordination, National Monitoring Program (RWQCB)	<ul style="list-style-type: none"> <li>Riparian fencing projects (APDP in progress)</li> </ul>	Prioritization of problem areas needed. Willing landowner involvement needed	20%
<b>BACT – 3 Illegal Moorings</b>	Agreement with oyster grower to monitor boats and mooring	<ul style="list-style-type: none"> <li>Harbor debris removal (APDP in progress)</li> </ul>	Agency coordination needed	80%
<b>NUTR – 4 Residential BMPs</b> (Related: EDU –1)	35% of urban residents already have bay-friendly gardens	<ul style="list-style-type: none"> <li>Development of <i>Yards and Neighbors Brochure</i> project (APDP)</li> </ul>	Action complete	100%
<b>HMT – 2 Marina BMPs</b> (Related: EDU –2)	Coordination with bay front businesses.	<ul style="list-style-type: none"> <li>Boatyard BMPs</li> <li>Boat rinse station project</li> </ul>	Action complete	100%
<b>HAB –10 Nonindigenous Species</b>	Coordination with public landowners and permitting agencies	<ul style="list-style-type: none"> <li>Restoring Los Osos (velde grass removal project)(APDP)</li> <li><i>A. donax</i> eradication project (APDP)</li> </ul>	On-going – permit delays and costs and cooperation between landowners and agencies	5%