

A.2.2. Results Chains

The results chains presented here illustrate our theories of change associated with specific strategies or suites of strategies, as represented in the 2005 recovery plan and subsequent 3YWPs.

Key and Definitions for Results Chains

-  Results Chain
-  Strategy
-  Action
-  Intermediate Result (*associated with factors, stressors or stresses*)
-  Pressure Reduction Result
-  Ecosystem Component
-  Goal
-  Objective
-  Indicator
-  Text Box (various colors)
-  Group Box (various colors)

In this section, we use the following symbols and terminology to describe our theories of change:

A strategy is a bundle of actions that, when combined, are intended to achieve a common goal. Strategies are intended to mitigate pressures or their underlying conditions and root causes, restore ecosystems or species populations, or provide capacity to achieve goals. Strategies include one or more actions (capital projects, programs, etc.) and are designed to achieve specific outcomes, objectives, and goals.

Actions focus on delivery of a specific outcome or output associated with a desired result. Actions include capital projects (e.g. restoration and acquisition), program development or implementation, education and outreach, research, etc. Actions can be completed on a near-term (i.e. 2 years or less) or longer-term time scale.

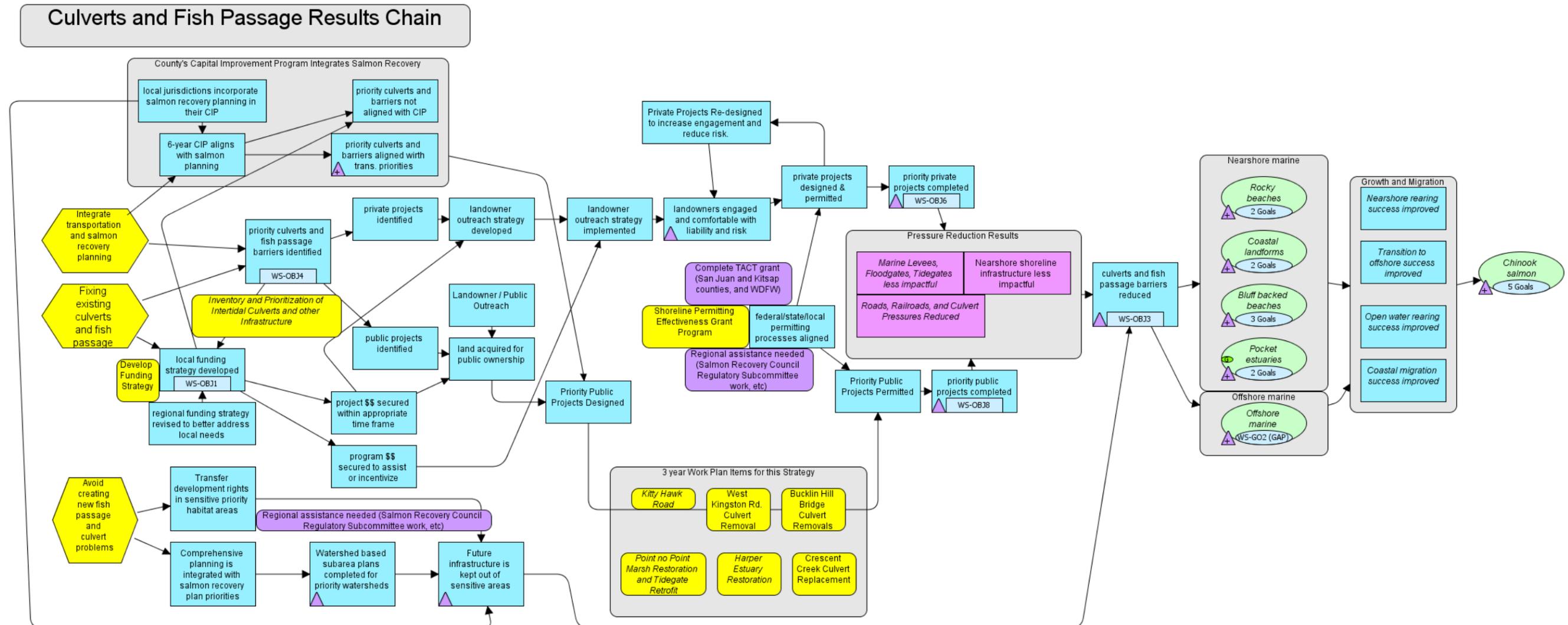
Intermediate results are the expected changes following the implementation of a strategy or action that are necessary steps toward achieving a desired future status or goal. Within a results chain, intermediate results may be identified for results boxes (blue) as well as pressure reduction boxes (purple).

Objectives are the desired outcomes for a subset of intermediate results, most often those which are easily monitored or those which provide the most useful information about effectiveness of a specific course of action.

Effectiveness indicators are most often developed for critical intermediate results within a results chain, or those that can provide the most information about whether actions are having the desired effects. They can include indicators of implementation, effectiveness, or validation and are used to assess whether progress is being made toward specific objectives and goals. In the *Measuring Effectiveness* tables in the following section, indicators are rated as follows: 4 = Very High Priority, 3 = High Priority, 2 = Medium Priority, 1 = Low Priority, blank = Priority Not Specified.

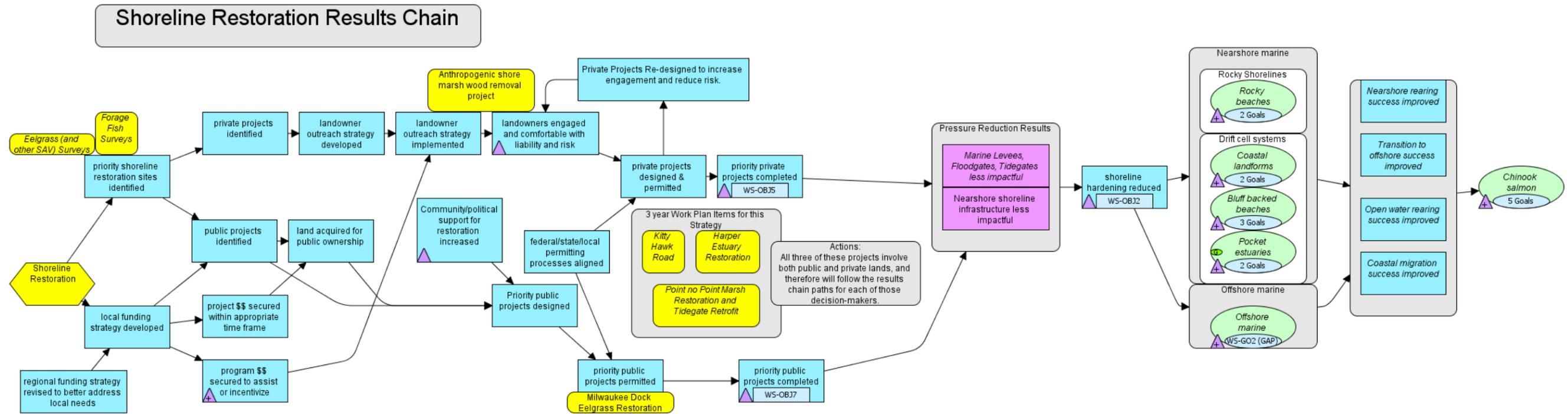
THEORY OF CHANGE: 01. Culverts and Fish Passage

Description: There are many shoreline culverts in the West Sound that restrict both tidal flow and fish passage, some at the mouths of streams and many that impound small marshes or inlets. This theory of change focuses on both restoration at the culvert locations and prevention of new infrastructure restrictions along the shoreline, through three sub-strategies: 1) Integrate transportation and salmon recovery planning; 2) Fixing existing culverts and fish passage barriers; and 3) Avoid creating new fish passage and culvert problems. For the first – integrating the restoration of these culverts into transportation planning – inventory and prioritization is the first step, followed by funding and constructing the projects. Similarly, fixing existing culverts critically relies on inventory and prioritization as a first step and funding/construction in later phases. Finally, the third pathway – prevention of new development that restricts shoreline function – occurs through comprehensive planning and transfer of development rights in priority habitat areas. The result of success in this strategy will be increased functioning nearshore habitat, and increase availability of small streams for Chinook rearing and refuge.



THEORY OF CHANGE: 02. Shoreline Restoration

Description: Shoreline restoration in the West Sound can improve many facets of nearshore health that are important to Chinook rearing and refuge in the marine nearshore. There are two main tracts to this theory of change – to identify and fund shoreline restoration on both private and public shorelines, and to evaluate the key biological attributes (submerged aquatic vegetation and forage fish spawning) that will assist in further refinement of priority restoration locations. The opportunities for removal or modification of shoreline infrastructure will increase as the shoreline community property owners appreciate the opportunity to create healthy habitat. This should increase both political support for and public funding for shoreline restoration in the West Sound.



This focuses on restoration of nearshore habitat through removal or restoration of hardened marine shorelines, and/or the acquisition and protection of natural shoreline properties in priority habitats. Note that restoration of marine nearshore habitat likely includes other sets of actions that could be documented in additional results chains.

This results chain includes two primary watershed-specific subchains focused on improving success of shoreline restoration projects:

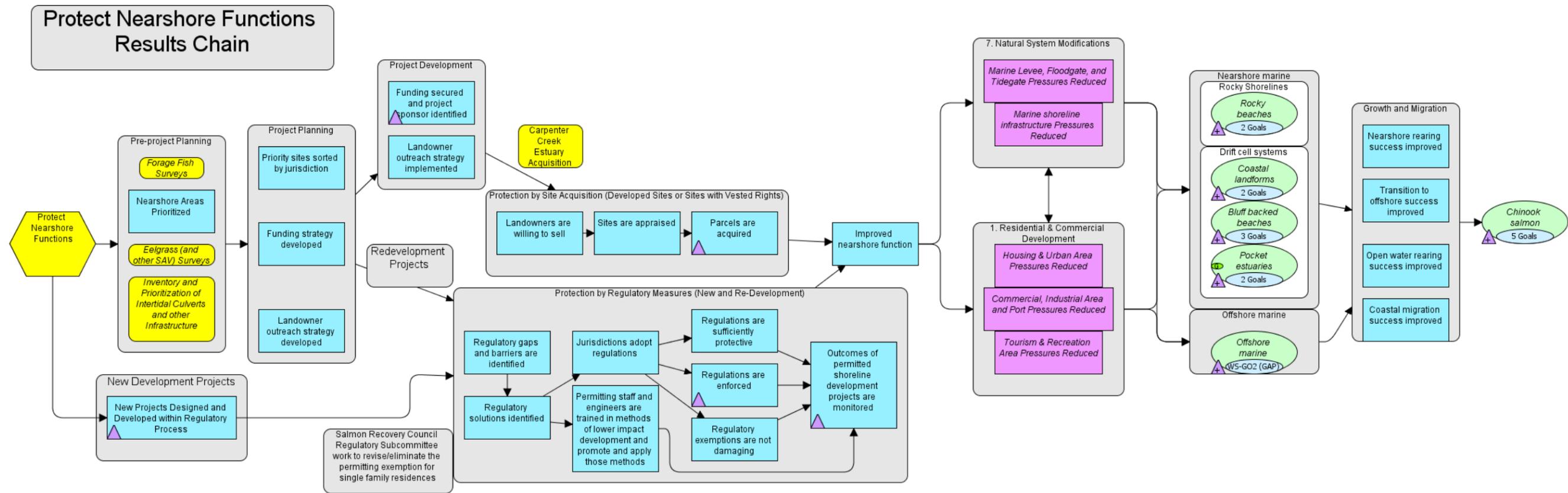
- 1) identify priority sites and engage relevant landowners
- 2) develop and implement a funding strategy

It also includes a third key subchain over which a watershed may have little control:

- 3) improve efficiencies and alignment in permitting processes

THEORY OF CHANGE: 03. Protect Nearshore Functions

Description: The protection of nearshore functions is integral to Chinook recovery in the West Sound because of the beauty of the shoreline, and the high value of living along the shoreline – which means it is at a risk for modification through development. By recognizing the existing high ecological values present along the West Sound shore, such as the locations of eelgrass or forage fish, those areas can be protected by acquisition or conservation measures. Additionally, existing regulations that are meant to protect nearshore habitats need to be supported by technical and financial support at the local and state permitting processes.



THEORY OF CHANGE: 04. Implement Education/Outreach

Description: Education of the public to support nearshore protection and restoration, in such a way that citizens, and the politicians that they elect understanding the importance of a healthy shoreline, should result in increased support for nearshore habitat improvement and protection. This theory of change focuses on identifying and targeting specific behaviors and values. The behavior changes that are identified should be practical, easy and eventually be considered socially desirable.

