

## Performance Measure 4.14: Increase Funding for Restoring Ecosystem Function

### Performance Measure (PM) Component Attributes

Type: Output Performance Measure

#### Delta Plan Description

Funding for projects that restore ecosystem functions and support a resilient, functioning Delta ecosystem increases.

#### Expectation

Funding and implementing projects that restore hydrological and geomorphic processes, are large-scale, improve connectivity, support native vegetation communities, and contribute to recovery of special-status species contributes to restoring ecosystem functions and supporting a resilient, functioning Delta ecosystem.

#### Metric

Project cost of covered actions that certify under ER policy 'A' Disclose Contributions to Restoring Ecosystem Function (Chapter 4, Appendix 2). Excludes funding for projects not related to protection, enhancement, or restoration. Reported annually.

#### Baseline

Set at zero in 2019 (when Policy ER P'A' went into effect).

#### Target

By 2030, 80 percent of total funding for covered action projects under ER Policy 'A' is the cost of projects with Ecosystem Restoration Tier 1 or 2 attributes.

### Basis for Selection

In order to achieve restoration goals in the Delta Reform Act, the Delta Plan recommends implementation of projects with specific high priority attributes and increase in funding for those high priority projects that restore ecosystem functions and support a resilient, functioning Delta ecosystem. High priority projects restore hydrological and geomorphic processes, are large-scale, improve connectivity, support native vegetation communities, and contribute to recovery of special-status species. This measure tracks the number and the cost of high quality conservation projects proceeding through the covered action process. This measure evaluates the percentage of the funding for the high tier projects according the definition in Delta Plan Policy ER P'A' (Chapter 4, Appendix 2).

A project's tier is determined by project proponents based on the expected ecosystem benefits for conservation projects in the Delta (Appendix 2 of the Delta Plan). Proponents disclose which priority attributes their project supports. The priority attributes are characteristics of the restorations projects which best available science indicates are critical to achieving the characteristics of a healthy Delta ecosystem. This is further described in Appendix 2 of the Delta Plan. Below is a summary of priority attributes for ecosystem restoration actions in the Delta:

1. **Restoring Hydrological, Geomorphic, and Biological Processes** - Targeting the re-establishment of hydrological, geomorphic, chemical, and biological processes in conservation projects, also termed "process-based restoration", is key to improving habitat characteristics related to the spatial arrangement of habitat patches, vegetation community composition and structure, and habitat requirements of sensitive specialist species.
2. **Being Large-Scale** – Conservation projects which incorporate large spatial scales and long time frames will increase the likelihood of creating natural systems capable of sustaining desired functions through uncertain future environmental condition (Peterson et al. 1998, SFEI-ASC 2016). Critical biotic interactions and physical processes depend on appropriate levels of heterogeneity (Larkin et al. 2016) made possible by large scale projects. Large intact core areas with minimal human intervention are important for facilitating the ecological interactions important to species persistence (Soule and Terborgh 1999).
3. **Improving Connectivity** - Connectivity is essential for the long-term persistence of native species. In the Delta, unobstructed flow through the channel system, lateral connections between channels and floodplains, and horizontal connections between surface and groundwater are different facets of connectivity. Nutrient and carbon cycling, vegetation community patch dynamics, and species-habitat interactions improve with increased connectivity (Vannote et al. 1980, Naiman et al. 1988, Ward 1989, Junk et al. 1989, Poff et al. 1997, Naiman and Decamps 1997). The various aspects of connectivity are crucial to the ability of riparian and wetland systems to support biodiversity. Improving connectivity will increase ecosystem resilience and adaptive potential in the face of a rapidly changing climate (Naiman et al. 1993, Seavy et al. 2009).
4. **Increasing Native Vegetation Cover** - The loss of native vegetation cover has greatly reduced habitat complexity in the Delta over the last 160 years, completely altering aquatic and intertidal foodweb dynamics (Moyle et al. 2010, Whipple et al. 2012). This loss of ecosystem complexity has been coupled with and exacerbated by substantial reduction in land-water connections (SFEI-ASC 2014, 2016). Restoration of complex ecosystems will require reestablishment of native vegetation communities, and the underlying processes that support their recruitment, disturbance regimes, and community succession. Restoring a variety of native vegetation cover types can promote ecological resilience and

enhance native biodiversity by providing a range of habitat options for species, thus expanding the types and numbers of species that a landscape can support.

- 5. Contributing to the Recovery of At-Risk Natural Communities or Species -**  
At least 35 native plant species and 86 fish and wildlife species in the Delta are imperiled by human activities, and are at varying risks of either local extirpation or outright extinction. Habitat loss and degradation and the resulting impacts on food web dynamics have been a major cause of the at-risk status of these species. Supporting ecosystem function such as nutrient transfer and primary production is an important requirement for the recovery of these species.

Tier 1 projects have all five priority attributes. Tier 2 projects have priority attribute 5 (support at-risk species) and three of the remaining four priority attributes. Delta Plan Policy 'A' Disclose Contributions to Restoring Ecosystem Function requires project proponents to disclose whether individual covered actions possess the listed priority attributes for the certification of the Delta Plan consistency.

### Linkage to Delta Reform Act and the Coequal Goals

**Delta Reform Act:** Water Code 85022, Water Code section 85057.5

Projects with high priority attributes restore ecosystem functions and support a resilient, functioning Delta are critical to achieving the characteristics of a healthy Delta ecosystem described in Water Code 85302(c). Funding and implementing these projects contributes to increase in the status and trends of “the health of the Delta’s estuary and wetland ecosystem for supporting viable populations of aquatic and terrestrial species, habitats, and processes, including viable populations of Delta fisheries and other aquatic organisms” (Water Code 85211(a)).

**Delta Plan Core Strategy:** Restore Ecosystem Function

## Methods

### Baseline Methods

Set to zero in 2019 (when ER P'A goes into effect)

### Target and Analysis Methods

The DRA establishes a process for qualifying projects to establish consistency with the Delta Plan (Water Code 85022). This means that a state or local agency proposing to undertake a qualifying action (covered action) must submit to the Council a written certification of consistency with detailed findings as to whether the covered action is consistent with the Delta Plan regulations. Any person may appeal a certification of consistency to the Council.

The Council’s covered action website and the associated database provide access to the certified covered actions and related details including the estimated project cost.

Under policy ER P'A', certified projects include, when applicable, a disclosure of project tiers, priority attributes supported by the project, and information on the project cost.

Each certification of consistency has 3 sections. Section 1 is the agency profile where project proponents provide details about the agency filing for consistency. Section 2 is a Covered Action profile where project proponent provides information about the covered action. The proponent discloses an estimated project cost along with a description of the project, a timeline, and other materials describing the project. The estimated project cost from this section of the consistency filing will be used as the primary data source. Section 3 of the filing includes a policy by policy detailing of the project proponent's findings. A proponent may find their project consistent, inconsistent, or that policy is not applicable to their projects. Any covered action in which ER P'A' is consistent will be considered.

Covered actions will only be counted in this measures after the consistency certification has been filed.

## Data Sources

### Primary Data Sources

1. Covered Actions certifications are documented on the [Delta Council's Covered Action website](https://coveredactions.deltacouncil.ca.gov/default.aspx). <https://coveredactions.deltacouncil.ca.gov/default.aspx>
  - a. Update Frequency: When certifications are submitted.

### Alternative Data Sources

Alternative data sources will be used if project funding is not disclosed on the Delta Council Covered Actions website. Alternative data sources can be used concurrently with the primary data sources depending on best available science and the availability of the primary source.

2. [California Environmental Quality Act \(CEQA\) Clearinghouse](http://opr.ca.gov/clearinghouse/ceqa/). <http://opr.ca.gov/clearinghouse/ceqa/>
  - a) Data Source: Project CEQA environmental impact report (EIR) includes cost of project alternatives considered. Covered actions have an associated EIR, as the Delta Plan consistency certification is triggered by the CEQA process.
  - b) Update Frequency: When EIR project files submitted.

## Process

### Data Collection

1. Download covered actions project documents from the covered actions website that is identified under policy ER P'A' annually.
2. Calculate the total cost of all projects under the policy ER P'A'.

3. Filter project documents by Ecosystem restoration tier.
4. Calculate percent of project cost with Tier 1 and Tier 2.

## Reporting

1. Reported annually as the amount of funding provided by Covered Actions proponents under policy ER P'A' by using graphs, charts, and tables.
2. This will be reported as a percentage of total funding for projects that find consistent or inconsistent with ER P'A' in their consistency certification that also find they are tier 1 or tier 2 projects.
3. If location is provided, include a map that displays the locations of the covered actions (Optional).
4. This will then be displayed on the Performance measures dashboard or [Viewperformance.deltacouncil.ca.gov](http://Viewperformance.deltacouncil.ca.gov).

## Additional Notes

Add any additional notes such as process deficiencies, dependencies, or opportunities

## References

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## Appendices

Please contact [Scott.Navarro@deltacouncil.ca.gov](mailto:Scott.Navarro@deltacouncil.ca.gov) if you have questions regarding accessibility.