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Frequently Asked Questions

Recovery Action Mapping Tool

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Revision History

Description	Author	Date
Final draft complete	Shanna Dunn	2/25

Executive Summary

The Recovery Action Mapping Tool allows users to visually interact with and query actions that were developed to recover species listed under the Endangered Species Act (ESA). Recovery actions are housed in a database and displayed in the web map.

Frequently Asked Questions

How will the data be used for reporting to West Coast Region managers and NOAA Fisheries headquarters?

Annual implementation reports will be generated for West Coast Region managers, NOAA Fisheries headquarters, & species recovery partners. Implementation progress will inform priorities, adaptive management processes, and funding decisions.

Why are some of the fields not editable?

Some fields should not be edited because the values are never supposed to be changed or because they are autogenerated. For example, it is not possible to edit the “Action ID” field because it is the unique database ID, which is never to be changed. It’s also not possible to edit the “Date Modified” field because it is autogenerated. If a field is “greyed out” and it cannot be clicked on, it is not editable.

When will I see saved edits displayed in the tool?

Saved data edits are pushed from the Oracle database to the Recovery Action Mapping Tool every hour.

How do I know which actions I can/should edit?

The database administrator can provide you with a description of your editing rights and a list of action IDs that are connected to your user account. If you don’t have editing rights to a particular action, the system will not allow you to edit that action. An error window appears when a user does not have editing rights to that action. In general, if you are a recovery coordinator, you are a “data owner” and you should be able to edit the recovery actions from the recovery plans that you are responsible for implementing. If your responsibilities are only for one geographic portion of a recovery plan, you will only be able to edit actions within that geographic portion. These constraints ensure that the correct staff members have access to the correct action records.

Can users without @noaa.gov emails edit actions?

Yes, partners outside NOAA Fisheries have been given editing rights. These rights were assigned by the recovery coordinators. Recovery coordinators may request that a partner be allowed to login and edit certain actions or that a partner be removed from the system and no longer enabled for action editing. These requests to add or remove editors, who are outside of NOAA Fisheries, should go to the database administrator.

How do I know what a partner edited?

There is a data log captured in the Oracle database; every edit is recorded by date and time with the user's ID. All edits can be retrieved from the data log.

How often should I update the actions?

Actions should be edited as information becomes available. Each action should be viewed and updated, if needed, at least twice per calendar year to keep track of implementation progress. Data update requests will be sent to you prior to the annual implementation reporting for West Coast Region managers and NOAA Fisheries headquarters. Data update requests will also be sent to you prior to publishing 5-year status reviews. The action data updates will be used to determine if we are meeting the Government Performance and Results Act measure that requires us to track the number and percent of ongoing and completed recovery actions for ESA-listed species and to determine our progress implementing recovery plans.

What if I make a mistake and need the edits rolled back?

If you make an editing mistake and you can't figure out or remember what the original value was, you can contact the database administrator to rollback the edit. The database administrator will view the data log, which captures all edits, and replace the edited value with the correct value. Also, to keep track of actions and any changes that were made during editing sessions, users can periodically export versions of the actions and/or related projects to Excel and store the files in a safe place for reference.

What is the methodology used for mapping actions? How are affected fish populations chosen?

Actions are mapped according to their location descriptions in source documents. The location equals the exact area or point where the action is being implemented. In other words, the location is the smallest geographic area that circumscribes the spatial extent of the action. The location does not include areas that will be affected by the action. For example, if an action states, "change hydropower operations at a specific dam to increase flow for migrating fish", the location is the dam site; it does not include any downstream portions of the river that will be affected by the increased flow. The species or populations that will be or are being affected by an action are listed in the action details to account for migration patterns. In the example above, any species that migrate through the river, below the dam site, would be considered affected by the action.

- A single action can be mapped to one point, multiple points, one hydrologic unit (HU), or multiple HUs. However, a single action cannot be mapped to a combination of points and polygons.

- A single action can only be mapped to one level of HUs in the Watershed Boundary Dataset (WBD) hierarchy. The hierarchy levels are sub-basins (8 digit code), watersheds (10 digit code), and sub-watersheds (12 digit code).
- Mapping each action to one level in the Watershed Boundary Dataset enables manipulation of the code hierarchy to calculate the total number of unique actions in each polygon at any level.
- The total number of unique actions within a given domain or HU is denoted in a symbol located at the polygon's centroid; this total number includes any actions mapped to points which lie within the boundary of that polygon.

Action locations described as being "in the ocean", "offshore", or "in a river plume" were mapped to HU polygons in the ocean. Ocean HUs extend out to the 3 nautical mile limit in the WBD. In Washington and Oregon, the coastal HUs are separated from the ocean HUs by a coastline boundary. In California, there is no coastline boundary; the coastal HUs include ocean areas. Why does this matter? With regards to this tool, actions mapped to ocean HUs in Washington and Oregon are not counted in the domain action count, but actions mapped to coastal/ocean HUs in California are counted in the domain action count.

One important distinction is the difference between an action's source vs. location. Source refers to the document in which the action was written. Location refers to the exact area or point where the action is being implemented. Even though NOAA Fisheries publishes documents that are generally affiliated with salmon recovery domains, not all actions in each document will be located within its affiliated recovery domain boundary. For example, the Middle Columbia River Steelhead Distinct Population Segment ESA Recovery Plan has actions written in the document that are located outside of the Middle Columbia River recovery domain boundary. An action in this plan states, "reduce predation on steelhead by non-native species in the lower Columbia River and estuary". The action location is actually within the boundary of the Lower Columbia River recovery domain. Users should be aware of this mapping intricacy. There are two different kinds of queries that can be accomplished (1) which actions were written in a specific source document? (2) which actions are located within a specific recovery domain boundary?

Additionally, there are actions mapped to locations which are completely outside of all recovery domain boundaries. These actions can be viewed by zooming in past the home map view, which only shows recovery domain action counts. The sub-basin, watershed, and sub-watershed map views will display all action counts, regardless of whether they are within a recovery domain boundary or not.

What is considered a related “project”?

Various recovery planning groups used hierarchical levels of data. Actions in certain areas may have sub-level data, these sub-levels are called “action steps” or “activities”. In this tool, all sub-level terms below the action level (in any hierarchy) are called “projects” to simplify the

terminology. Anything “below” an action is called a project, regardless of who funded it, or which database it’s stored in.

“Projects” are stored in 3 databases: (1) some projects are stored in the RAMT database (2) other projects can be related to an action from the Pacific Coastal Salmon Recovery Fund (PCSRF) database (3) or the Pacific Northwest Salmon Habitat Projects (PNSHP) database, which houses data from many funders across the landscape. The projects in PCSRF and PNSHP are funded on-the-ground projects that were completed. The RAMT projects may or may not be funded yet, and may or may not have been started yet; they were included because they were written in a recovery plan data hierarchy.

The goal is to create a one-stop shop for gathering all the work being done to help recover listed species (not only salmon, data are being gathered for all listed species in the region) by relating projects to recovery actions, regardless of the funding sources. For example, if an action in a recovery plan states, “eradicate invasive plant species from riparian areas” (action 100699) and there is a funded project X in the PCSRF database that removed invasive riparian plants from river mile 1 to river mile 3 in Willow Creek, project X would be related to action 100699 because the action includes Willow Creek HU 1707030602 as a watershed location.

What is the methodology for relating PCSRF & PNSHP projects to recovery actions?

Projects should be chosen by staff biologists to be related to recovery actions based on a set of criteria.

1. Location: the project has to have been completed within or at the action location. The project location must be physically within at least one of the hydrologic units listed in one of these fields: “Sub-basins”, “Watersheds”, “Sub-watersheds” or the project must be at the exact latitude/longitude in the “Points” field.
2. Type: the project has to have addressed exactly what is described in the action’s “description proposed” field and match the action “type” field.
3. Timeframe: the project has to have been completed after the recovery plan was written, hence after the action was written.

The evaluation of these criteria should be done outside of the Recovery Action Mapping Tool. This tool is the place to relate a project to an action, or to relate multiple projects to an action, or to relate a project to multiple actions. This tool is NOT the place to determine whether or not a given project should be related to a given action. Outside this tool, geospatial assessments need to be performed to find out if a project is mapped to a location that is “within or at an action’s location”. After the project location is deemed “within or at an action’s location”, the project type and timeframe will need to be assessed to determine if the project really matches, or “implements”, a given recovery action. If all of these criteria are met and the action-project relationship is determined to be logical, the project can be related to an action in the tool by an editor.