

Quick Start Guide MMP Tool

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Prepared for:

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Introduction

The Mitigation and Monitoring Practices (MMP) Tool is a Windows application hosted on the F-TWG website (<http://nyfisheriestwg.ene.com/>). It houses a collection of MMPs, extracted from a range of sources (including agency reports, environmental assessments, scientific literature, technical guidance documents, and others). It allows a User to sort and organize MMPs depending on specific categories of interest selected by the User. The categories include, but are not limited to:

- Resource Groups;
- Stressors;
- Potential effects;
- Development phases of offshore wind;
- Mitigation or Monitoring;
- Type of industry; and
- Implementation Status.

This Quick Start Guide is a quick reference to guide the User through use of the MMP Tool. A full User Manual for the MMP Tool is also available on the F-TWG website, and can be accessed by the User for more detailed information, such as definitions of terms for each of the categories within the MMP Tool.

Tool Instructions

1. The Tool is located under the Resources tab at the top of the homepage (see Figure 1). Upon opening the Resources tab, the User navigates to “MMP Tool” (see Figure 1).

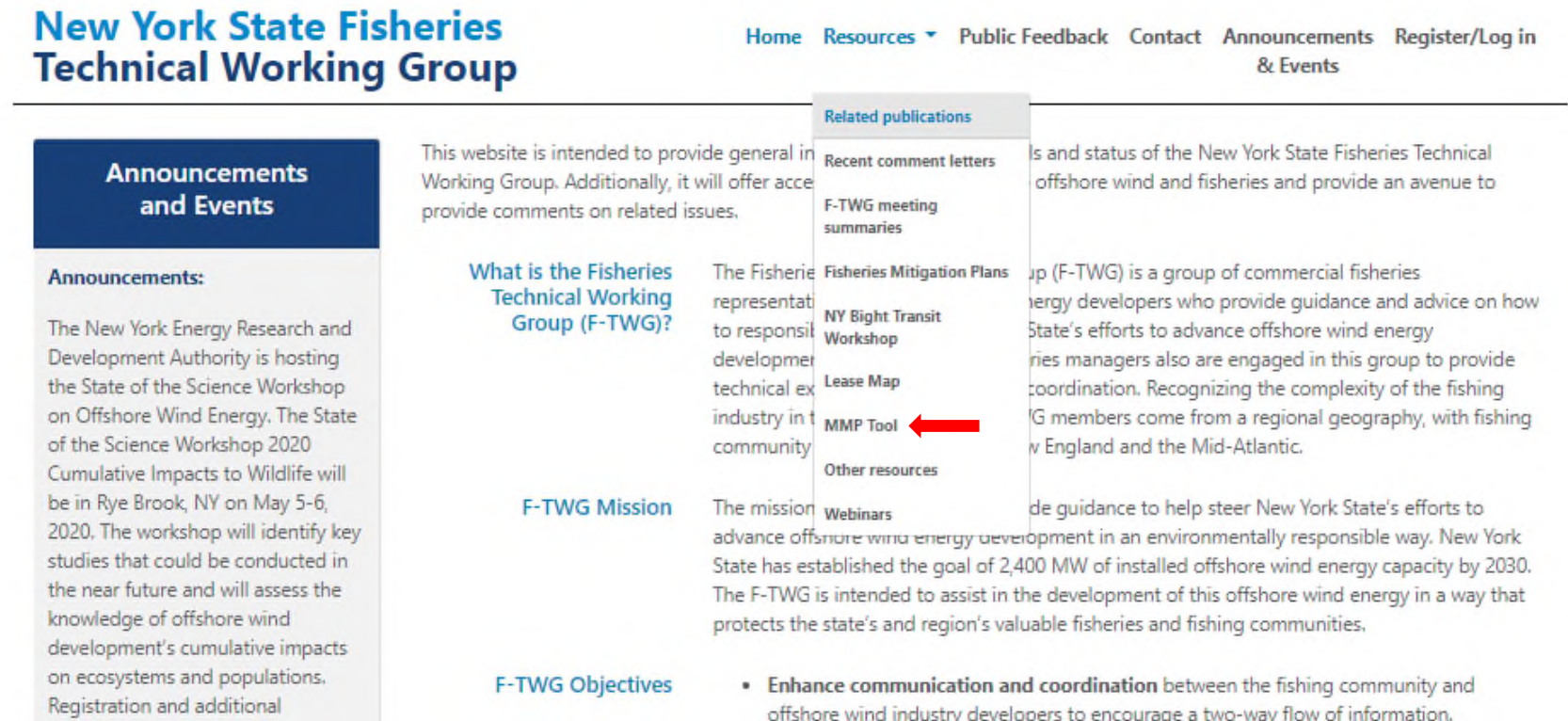


Figure 1 Opening the Tool.

2. The User clicks on “MMP Tool” to navigate to the input screen of the Tool (see Figure 2).

New York State Fisheries Technical Working Group

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Mitigation and Monitoring Practices Tool (MMP Tool)

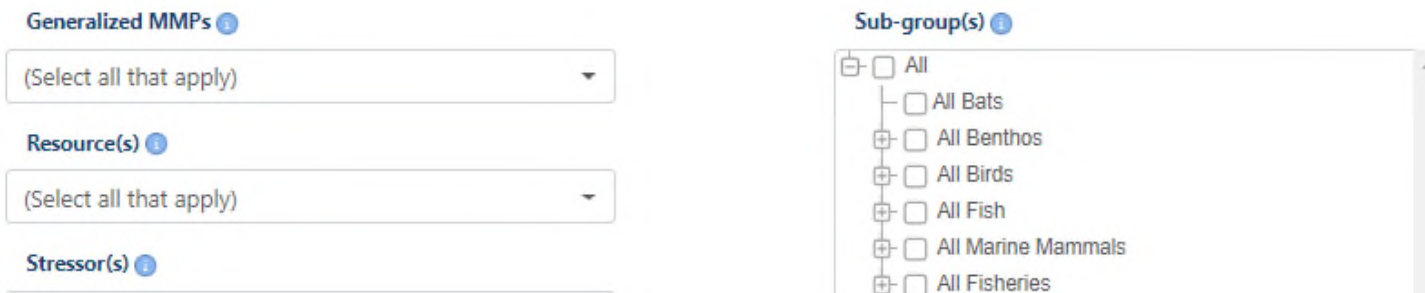
Website last updated: 7/26/2019

[Quick Start Guide](#) [User Manual](#) [MMP Tool Glossary](#)

The New York State Energy Research and Development Authority (NYSERDA) has developed this Mitigation and Monitoring Practices Tool (Tool) that sorts and filters a wide range of mitigation and monitoring practices (MMPs) for evaluating and considering best management practices, at both broad and project-specific scales. The Tool houses a collection of MMPs, extracted from a range of sources (including agency reports, environmental assessments, scientific literature, technical guidance documents, and others), and is intended to serve as a resource to the Environmental Technical Working Group (E-TWG) and the Fisheries Technical Working Group (F-TWG), as well as other stakeholders such as representatives from the offshore wind industry, agencies, and non-governmental organizations. The Tool is searchable by various categories, including, but not limited to:

- Resource Groups - birds/bats, marine mammals/sea turtles, fish, benthos, and fisheries;
- Stressors;
- Potential effects; and
- Development phases of offshore wind.

As part of the effort to support development and evaluation of MMPs, the Tool provides details about these MMPs that could support further evaluation of how best to incorporate MMPs into the state's plans for offshore wind energy development. This Tool does not prioritize or judge the value of individual or combined MMPs, and it does not consider site- and project-specific conditions that might affect how and whether certain MMPs may be practicably implemented. It does, however, provide several sorting criteria that may be useful to the E-TWG and F-TWG and other users when assessing potential MMPs.



The screenshot shows the input interface of the MMP Tool. It features three filter sections on the left: 'Generalized MMPs' with a dropdown menu currently set to '(Select all that apply)'; 'Resource(s)' with a similar dropdown menu; and 'Stressor(s)' with a dropdown menu. On the right, there is a 'Sub-group(s)' section containing a tree view of categories. The tree starts with 'All' (checked), which branches into 'All Bats', 'All Benthos', 'All Birds', 'All Fish', 'All Marine Mammals', and 'All Fisheries'. Each sub-group has a plus icon to its left, indicating it can be expanded.

Figure 2 Input screen of the Tool.

3. Dropdown menus appear under each category in the input screen of the Tool. The User may select more than one sub-category by clicking on each item in the category’s dropdown menu. For types of resources, the User may select sub-groups of bats, benthos, birds, fish, marine mammals, fisheries, and/or sea turtles in the Sub-group(s) box. An “All” checkbox is also available in the Sub-group(s) box to save time if all sub-groups are desired in the output. If a subgroup has a “+”, then the User may select it to expand the list to view more specific sub-group(s). The User clicks the boxes next to the specific sub-group(s) that should be included in the output of the Tool. (See Figure 3 for an example selection.) Adding criteria is an “and” condition. For example, if the user chooses fisheries and marine mammals as resources, MMPs for both resources will be included in results.

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The screenshot displays the input interface of the MMP Tool. On the left, there are seven dropdown menus, each with a blue information icon and the text "(Select all that apply)":

- Generalized MMPs
- Resource(s)
- Stressor(s)
- Potential Effect(s)
- Development Phase(s)
- Industry(ies)

On the right, there is a "Sub-group(s)" section with a tree view. The tree is expanded to show sub-groups under "All Fish":

- All (checkbox)
- All Bats (checkbox)
- All Benthos (checkbox)
- All Birds (checkbox)
- All Fish (checkbox, checked)
- All Marine Mammals (checkbox)
 - Low-Frequency Cetaceans (checkbox, checked)
 - Mid-Frequency Cetaceans (checkbox)

Below the tree view are three more dropdown menus, each with a blue information icon and the text "(Select all that apply)":

- Implementation Status
- Mitigation/Monitoring
- Mitigation Hierarchy

At the bottom center, there is a blue button labeled "Query MMPs" with a red arrow pointing to it from the right.

Figure 3 Example of selected categories.

4. After selecting sub-categories and sub-groups, the User clicks the “Query MMPs” radio button (red arrow in Figure 3).
5. Below the category boxes, an output table will appear that shows the results of sorting and filtering the MMP database for the combination of chosen sub-categories and sub-groups (see Figure 4). To access specific examples of generalized MMPs (i.e., non-specific MMPs applicable to multiple sub-groups), the User clicks the “Generalized MMP” dropdown menu and selects one or more generalized MMPs (A in Figure 4). This selection will sort and filter the results box based on the selected generalized MMP(s). Scroll bars (B in Figure 4) allow the User to slide the output box to see information that does not fit on the screen.

All

A

38 result(s)

Generalized MMP	MMP	Resource(s)	Stressor(s)	Potential Effect(s)	Sub-group(s)
Barriers	Use of proper electrical shielding on cables to minimize electromagnetic fields (EMF), vibrations, and heat.	Fish	EMF, Vibration, Heat	Behavioral Disturbance, Displacement, Habitat Fragmentation/Modification	Demersal/Groundfish
Barriers	Use of scour protection such as rock mattresses, boulders, grout bars, and grass mattresses.	Fish	Scouring	Behavioral Disturbance, Displacement	All Fish

B

Export Query Results

Figure 4 Example output of specific MMPs

6. To the far right of the output box is a column entitled “Citation(s).” The User can hover over the citation to access the full citation (see Figure 5).

Industry(ies)	Implementation Status	Implementation Details	Mitigation/Monitoring	Mitigation Hierarchy	Citation(s)
Offshore Wind, Onshore Wind, Maritime	Implemented and Evidence of Effectiveness	CMACS (2003) conducting modeling simulations on the effectiveness of cable shielding at minimizing EMF, they found that a cable with perfect shielding does not generate and electric field directly, however a magnetic field is generated in the local environment by the alternating current in the cable. Cables with imperfect shielding produce EMFs, but the affected area is smaller than cables without shielding.	Mitigation	Minimization	<p> Bureau of Ocean Energy Management (BOEM). 2011. Effects of EMFs from Undersea Power Cables on Elasmobranchs and Other Marine Species. Final Report. OCS BOEMRE-2011-09. Available at: https://www.boem.gov/Environmental-Stewardship/Environmental-Studies/Pacific-Region/Studies/2011-09-EMF-Effects.aspx. Accessed February 6, 2019. </p> BOEM 2011; BOEM 2016a; BOEM 2016c; CMACS 2003; Taormina et al. 2018;
Offshore Wind, Oil and Gas, Maritime	Implemented and Evidence of Effectiveness	Monitoring of scour protection measures at European windfarms have provided data on the efficacy and potential	Mitigation	Avoidance, Minimization	BOEM 2015b; BOEM 2016a; BOEM 2016c; Hansen et al. 2007; MMS 2007;

Export Query Results

Figure 5 Example output from hovering over a citation in the “Citation(s)” column of the output box.

7. In the columns entitled “MMP” and “Implementation Details,” the total characters are truncated to 500 to maintain a user-friendly screen view. In the case that the information in the cell is more than 500 characters, an ellipsis can be seen at the end of the 500 characters in the cell. The User can hover over the cell to access the full entry (see Figures 6a and 6b).


Generalized MMP	MMP	Resource
	...become displaced and need to travel farther distances to fishing grounds.	
Compensation	Compensation through out-of-kind solutions to enhance populations by acting on biological parameters that influence population levels including 1) habitat expansion, 2) prey fostering, 3) predator control, 4) exotic/invasive species removal, 5) species reintroductions/resettlement, and 6) supplementary feedings.	Birds an
Compensation	While renewable energy projects may displace existing uses of the marine environment, they may also open doors to new opportunities for fishermen. Some examples include research, repair, construction, enforcement, monitoring, and guarding. Mitigation funds could be used to help fishermen transition into these new positions through the development of training programs and the provision of gear needed to support their new role(s). Other examples of such new industries might include sight-seein... 	Fisherie
Compensation	Compensation Fund: The developer and fishing industry representatives should develop a compensation fund and the processes for managing the fund. A Compensation Fund Plan should establish the sources and amount of funding, the terms of compensation, the date necessary to measure lease, lease	Fisherie

Figure 6a Example output of a cell with more than 500 characters with ellipsis indicated with red arrow.

Generalized MMP	MMP	Re:
	become displaced and need to travel further distances to fishing	
Compensation	<p>While renewable energy projects may displace existing uses of the marine environment, they may also open doors to new opportunities for fishermen. Some examples include research, repair, construction, enforcement, monitoring, and guarding. Mitigation funds could be used to help fishermen transition into these new positions through the development of training programs and the provision of gear needed to support their new role(s). Other examples of such new industries might include sight-seeing (offshore wind energy projects have been viewed as attractions), charter fishing, and SCUBA diving excursions. Specific training might include apprenticeships, product-quality training, best practices for the on-board handling of catch, and peer-to-peer networks to facilitate the exchange of information. Expansion into new fisheries could include targeting other wild species as well as becoming involved in aquaculture activities, given the potential opportunities to take advantage of offshore renewable energy infrastructure to establish shellfish and finfish aquaculture operations, or even the culture of algae.</p>	Bin
Compensation	<p>While renewable energy projects may displace existing uses of the marine environment, they may also open doors to new opportunities for fishermen. Some examples include research, repair, construction, enforcement, monitoring, and guarding. Mitigation funds could be used to help fishermen transition into these new positions through the development of training programs and the provision of gear needed to support their new role(s). Other examples of such new industries might include sight-seeing (offshore wind energy projects have been viewed as attractions), charter fishing, and SCUBA diving excursions. Specific training might include apprenticeships, product-quality training, best practices for the on-board handling of catch, and peer-to-peer networks to facilitate the exchange of information. Expansion into new fisheries could include targeting other wild species as well as becoming involved in aquaculture activities, given the potential opportunities to take advantage of offshore renewable energy infrastructure to establish shellfish and finfish aquaculture operations, or even the culture of algae.</p>	Fisl
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Figure 6b Example output from hovering over a cell with more than 500 characters in the output box.

8. Outputs from the Tool can be downloaded into an excel spreadsheet to preserve the record or further manipulate the information for MMP evaluation. To do this, the User clicks the “Export Query Results” radio button (A in Figure 7) at the bottom of the screen. The User can then save the excel file (B in Figure 7) in a specified folder by the User.

Generalized MMP	MMP	Resource(s)	Stressor(s)	Potential Effect(s)	Sub-group(s)
Barriers	Use of proper electrical shielding on cables to minimize electromagnetic fields (EMF), vibrations, and heat.	Fish	EMF, Vibration, Heat	Behavioral Disturbance, Displacement, Habitat Fragmentation/Modification	Demersal/Groundfish
Barriers	Use of scour protection such as rock mattresses, boulders, grout bags, and grass mattresses.	Fish	Scouring	Behavioral Disturbance, Displacement	All Fish

Export Query Results A

📄 MMPResults (1).xlsx B Show all

Figure 7 Example of how to export and save Query Results.