# Fish Passage Plan (FPP) Change Request Form

**Change Form # & Title**: 17OVE001 – MOC Fish Impacts Section

**Date Submitted**: December 2, 2016; Revised/Resubmitted 2/7/17

**Project**: All projects covered by the MOC process

**Requester Name, Agency**: Gary Fredricks, NOAA Fisheries

**Final Action:** **APPROVED as revised at FPOM 2/9/17**

**FPP SECTION**: Chapter 1 – Overview. Section 3.3.3. FPOM Coordination - MOC

**JUSTIFICATION**: The analysis of potential impacts to ESA-listed species needs to be better defined (and standardized) to meet the requirement to assess incidental take of listed salmon and steelhead under the current FCRPS Biological Opinion.

**PROPOSED CHANGES**:  (see below for edits to existing FPP text and MOC template in “track changes”)

**COMMENTS**:

1/12/17 FPOM: Setter has reached out to projects and is fine with this change. PENDING further discussion at FPP meeting on 1/26.

2/7/17 email from Erin Kovalchuk: Chris Peery updated the 17OVE001 FPP change form submitted by Fredricks. Please review this document and it will be discussed at Thursday's FPOM meeting.

2/9/17 FPOM: Peery went over the revisions he submitted. Fredricks is good with the edits and additions, as long as the DART website continues to provide that info. Peery agreed and noted that there will hopefully be different sources in the future. Fredricks stated that split ladder data are currently available on the FPC website. Some folks weren’t aware of that. Mackey said that FPC has been very responsive to the request for fish counts. Fredricks said a “road map” to information would be helpful. Peery will revise with updated links where necessary.

**RECORD OF FINAL ACTION**:

2/9/17 FPOM Approved, as revised with updated links to sources of data.

**3.3.3. Memorandum of Coordination (MOC)**

**i.** For O&M activities within the District’s Operations Division, project personnel will communicate their needs to a District biologist (or other appropriate personnel) who will compile relevant information into a *Memorandum of Coordination* (MOC) that includes a summary of the activity, location, date, time, analyses of potential impacts to ESA-listed species, and potential alternative actions (see MOC template at the end of the Overview).

For each proposed action requiring an MOC, the analysis of potential impacts will include the following:

10-year average passage during the dates of impact for adults and juveniles for each listed species.

* Adult 10 yr averages at http://www.cbr.washington.edu/dart/query/adult\_ladder\_sum. Select “Download CSV Only” to receive data in spreadsheet format.
* Adult counts by ladder at http://www.cbr.washington.edu/dart/query/adult\_ladder\_sum. 10-yr averages currently not available by ladder so you will need to download the last 10 years of counts separately and average on a spreadsheet.
* Smolt index data at http://www.cbr.washington.edu/dart/query/smolt\_graph\_text. Select “Download CSV Only” to receive data in spreadsheet format. 10-yr averages not available for smolt data so you will need to download the last 10 years of data separately and average on a spreadsheet.

Statement about the current year’s run (e.g., higher or lower than 10-year average);

* Pre-season see <https://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/g-forecast.cfm>. Or contact your District adult fish passage coordinator.
* Mid-season, compare current counts to date to the 10-year average to date (see 1.a. above).

Estimated exposure to impact for adults and/or juveniles, as appropriate, by species (number or percentage of the 10 yr average that occurs during dates of action).

Type of impact for adults and/or juveniles, as appropriate, by species (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.);

Final judgement on scale of impact (negligible, minor, significant) e.g. “As a result of this analysis, we anticipate that the proposed action will result in negligible impact to listed species.”);

After action update; what the effect of the action was on listed species. This statement could simply state that the MOC analysis was correct and the action went as expected, or it could explain how the actual action changed the expected effect (e.g., you didn’t need to close that AWS valve after all, so there was no impact of the action). List any actual mortality noted as a result of the action.

**ii.** The District biologist will submit the MOC to FPOM at the next monthly meeting and/or via email, and then if necessary, follow up with appropriate FPOM members via phone or email.

**iii.** For planned O&M, the MOC should be provided to FPOM for review at least two weeks in advance.

**iv.** For unplanned, non-emergency O&M (e.g., equipment failure), the MOC should be provided to FPOM at least three workdays in advance.

**v.** Emergency O&M may be performed immediately and an MOC submitted to FPOM as soon as possible, either before or after the activity (see **section 1.3**).

**vi.** FPOM members may submit responses to an MOC by the requested due date via email, phone or in person, and all responses will be documented in the final MOC for distribution to FPOM and posting to the FPOM website. The District biologist will forward the final coordinated operation to project personnel, and if necessary, RCC will issue a teletype.

**vii.** For research and construction activities involving the Planning Division, the Planning Division biologists will coordinate the effort with Operations Division biologists to develop an MOC. Research development is largely carried out and documented through the Corps’ Anadromous Fish Evaluation Program (AFEP) in the regional forum Studies Review Work Group (SRWG). New construction or modification of fish facilities is typically carried out and documented through the Fish Facility Design Review Work Group (FFDRWG).

**viii.** If implementation requires assistance from Project personnel, temporary equipment installation, temporary facility modification, and/or operational changes, then both Planning and Operations biologists will work closely together and with Project personnel and any others necessary to ensure all personnel are continually informed and updated throughout the process.

**OFFICIAL MEMO of COORDINATION (MOC) FOR**

**NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE-** *(filled in by District OD Biologist)*

**COORDINATION DATE-**

**PROJECT-**

**RESPONSE DATE-**

1. **Description of problem.**
2. **Type of outage required** *(relate to deviation from FPP).*
3. **Dates of impacts/repairs.**
4. **Length of time for repairs.**
5. **Impact on fish facility operation** *(fishway, JFF, etc.)***.**
6. **Impact on project operations** (*unit priority, forebay/tailwater operation and/or spill*).
7. **Analysis of potential impacts to fish. Include:**
	1. 10-year average passage of adults and juveniles of each affected listed species during dates of impact.
		1. Adult counts: <http://www.cbr.washington.edu/dart/query/adult_graph_text>.
		2. Adult counts *by ladder*:<http://www.cbr.washington.edu/dart/query/adult_ladder_sum>. To calculate 10-year average, download each of the most recent 10 years and copy into a spreadsheet for averaging.
		3. Smolt index: <http://www.cbr.washington.edu/dart/query/smolt_graph_text>. To calculate 10-year average, select the most recent 10 years (hold “ctrl” and select each year) and select download to .CSV spreadsheet.
	2. Statement about the current year’s run (e.g., higher or lower than 10-year average).
		1. Pre-season – NOAA adult returns forecast: <https://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/g-forecast.cfm>. Or contact the District adult fish passage coordinator.
		2. Mid-season - current counts to-date vs. 10-year average (see links in section **a.**).
	3. Estimated exposure to impact of adults and/or juveniles, as appropriate, by species (number or percentage of 10-year average that occurs during dates of impact).
	4. Type of impact to adults and/or juveniles, as appropriate, by species (e.g., increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.).
8. **Final judgement on scale of expected impacts (negligible, minor, significant) on:**
	1. Downstream migrants.
	2. Upstream migrants (including Bull Trout).
	3. Lamprey.
9. **Comments from agencies.**
10. **Final coordination results.**
11. **After Action update.**

Please email or call with questions or concerns.

Thank you,

Name

Project

Title of person writing MOC

E-mail address of person writing MOC