# Method 3: Work Area Isolation and Fish Removal in Streams, Large Waterbodies and for Pipe Bypass

# *3A1: Temporary Bypass for Stream Flow: Partial Channel*

**Project Title:**

**Project CIP Number:**

*See Section 3 of the SBE, Method 3 for a complete description of the activity and conservation measures for this method. You need this information to fill out this form.*

Isolation of In-water Work Area – Temporary Bypass for Stream Flow: Partial Channel

1. How will water be diverted in the channel?

Sandbags

Portable bladders

Other (describe):

2. Size of stream area that will be diverted:       Length       Width.

Total size of stream:       Length       Width.

3. Approximate duration in which stream will be bypassed:

4. Will any pumping of stream flow be conducted?  No  Yes

5. If pumps are used, what methods will be used to minimize erosion at the discharge site?

Ecology block “box” filled with gravel and riprap

Porous geotextile bags

Flow spreaders

Visqueen sheets or geotextile fabric

90-degree elbow at pipe end

Other (describe):

6. Are any bank protection methods being used to protect channel erosion?  No  Yes

If yes, explain:

7. Has project design for temporary bypass of a partial channel taken into consideration high-flow stormwater runoff that may occur during project construction?  No  Yes

Provide details:

Fish Removal and Handling

1. Will fish be removed from the whole stream where the bypass will occur?

No  Yes (fish removal within the whole channel is recommended prior to installation of bypass structure to minimize injury or mortality of fish during construction of bypass structure).

2. What method will be used to capture fish (see Table 4-6, page 4-11 of the SBE)?

Minnow traps

Seining

Dip nets

Electrofishing

3. Will all methods in Tables 4-5 and 4-7 on pages 4-10 through 4-12 of the SBE (fish transfer, storage, and release method) be followed?

Yes  No

If no, explain:

3. Will all methods in Table 3-1, page 3-13 of the SBE, (stream flow diversion technique) be followed?

Yes  No

If no, explain:

4. Will the intake structure of the pump have appropriately sized fish screening per NMFS’ Juvenile Fish Screen Criteria and Pump Intake Screen Guidelines?  Yes  No

If no, explain:

5. Has special consideration been made to facilitate fish removal in any pools left after water is diverted?  Yes  No Please explain:

Rewatering Work Area

1. Will rewatering of work area occur slowly and stepwise fashion to minimize sediment impacts downstream?  Yes  No

If no, explain how the water will be reintroduced into the work area:

Conservation Measures

The following table contains the conservation measures identified for Method 3A1. The table only provides a brief summary of the conservation measures. Please see Section 4 of the SBE for a complete description of each conservation measure. To get programmatic coverage by the Corps and Services for projects using this method, all conservation measures identified below must be included with the project (see Section 10 of the SBE). If, for some reason, a conservation measure is not applicable, or will not be used, you MUST provide a reason the conservation measure is not applicable or will not be used in the “Provide additional information” section below. Provide any additional conservation measures that may be implemented but are not listed. These may be found in Section 4: Conservation Measures of the SBE or in the City Standard Specifications.

| **Conservation Measures** | **Description** | **Included in**  **Project?** |
| --- | --- | --- |
| 31 | Follow proper work area isolation measures |  |
| 32 | Follow proper fish capture and handling measures |  |

Please provide any additional information on Conservation Measures used or not used for this Method: