

# Instructions for June 2006 Draft PRE-TREATMENT checklist FB - FISH PASSAGE IMPROVEMENT at BARRIERS

*To be used for fish passage improvement anywhere other than a stream crossing but, includes grade control or back-flooding weirs/structures associated with stream crossings.*

**Y** = Yes, the question applies and the answer is yes, comment if needed. **P** = Partially, the question cannot be answered definitively yes or no, comment suggested. **N** = No, the question applies and the answer is no, comment if needed.  
**D** = Don't know, the answer is unknown and cannot be found; preferable to blank. **A** = Not applicable, the question or sub-question does not apply to the feature.

*See Manual Part IX and VII for guidance. See below for 3-letter code key; see glossary for definitions.*

THE FEATURE LOCATION MUST BE DESCRIBED USING THE PROTOCOL FOR DOCUMENTING THE LOCATION OF HABITAT RESTORATION FEATURES. IT IS ESSENTIAL THAT SOMEONE CONDUCTING POST-TREATMENT MONITORING BE ABLE TO RELOCATE THE SAME SECTION OF STREAM WHERE THE FOLLOWING DATA WERE COLLECTED.

## **CHANNEL questions should be answered regardless of goals.**

1. Refers to aggradation at the barrier and caused by the barrier, not at a stream or reach level.
2. Refers to scour, incision and/or head-cutting resulting from the barrier, not at a stream or reach level.
3. Refers to other localized undesirable channel conditions such as braiding, flow obstructions, grade controls, undesirable lateral migration, narrowing, straightening, widening, etc. near the barrier, not at a stream or reach level.
4. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.

## **BANK questions should be answered regardless of goals.**

5. Stream bank erosion or apparent instability caused or affected by the barrier.
  - a. Location of erosion or instability relative to the proposed structure or barrier modification. Record location as upstream of, downstream of and/or within the barrier AND left and/or right bank determined looking downstream (e.g. DNS – LBK, RBK UPS – LBK WIN – LBK). Use comment space if needed.
  - b. Determine using visual evidence and knowledge of land use and erosion processes.
6. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.

## **FISH PASSAGE questions 7 & 8 pertain to adult fish. FISH PASSAGE questions 9 & 10 pertain to juvenile fish.**

- 7/9. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.
  - a. List species, by code from Manual Appendix E, for which passage improvement is aimed.
- 8/10. Answer based on quantitative data or visual evidence using best professional judgment.
  - a. Barrier category that exists pre-treatment, enter only one. See DFG Restoration Manual page IX-1.
  - b. Barrier category the treatment intends to achieve, enter only one. See DFG Restoration Manual page IX-1.

**Barrier Category Definitions:** *Temporal* – Impassable to all fish at certain flow conditions. *Partial* – Impassable to some fish species, during part or all life stages at all flows. *Total* – Impassable to all fish at all flows.

- c. Conditions that are blocking fish passage, enter all that apply. See Manual page IX-3.
- d. List conditions to be addressed by the fish passage project, enter all that apply.

## **Movement of watershed PRODUCTS questions should be answered regardless of goals.**

11. Refers to a current accumulation or a chronic occurrence of debris, substrate, or water behind the barrier.
  - a. Enter all that apply - debris (e.g. LDA), substrate (e.g. grade control) or water (e.g. at a dam or tide gate).
12. A specific goal stated in the contract, proposal or verbalized by project proponent or contract manager.

## **Code definitions**

|      |                                      |     |                        |     |                  |     |                        |
|------|--------------------------------------|-----|------------------------|-----|------------------|-----|------------------------|
| BAR  | Lack of stabilizing vegetation, bare | EMG | Emergent groundwater   | NRP | No resting pool  | UND | Undercut or Undermined |
| CHIN | Chinook salmon                       | FJH | Fish jump height       | OTH | Other            | UPS | Upstream               |
| CNR  | Concentrated runoff                  | GRZ | Grazing/grazing animal | PAR | Partial barrier  | USG | Unstable geology/soils |
| COHO | Coho salmon                          |     |                        | RBK | Right bank       | WTD | Water depth            |
| CT   | Cutthroat trout                      | HYD | Hydrologic processes   | SH  | Steelhead trout  | WTR | Water                  |
| DBR  | Debris                               | LBK | Left bank              | SUB | Substrate        | WTV | Water velocity         |
| DNS  | Downstream                           | NON | None                   | TEM | Temporal barrier |     |                        |
|      |                                      |     |                        | TOT | Total barrier    |     |                        |