

## APPENDIX B      Habitat Determination Screen for Bull Trout in Montana

### Definitions and Assumptions

- “Occupied stream zone” refers to a stream known to be occupied or potentially occupied by bull trout, or is designated critical habitat for bull trout. Includes the stream channel, and a 300-ft buffer on both sides of the channel (e.g., 300-ft left bank + 50-ft channel + 300-ft right bank = 650 ft total width of occupied stream zone).
- “Unoccupied stream zones” are those streams with direct connectivity to occupied stream zones, including intermittent streams and those perennial streams where recent sampling (e.g., <5 yrs) indicates the stream is not likely to be occupied or potentially occupied by bull trout; at a minimum, seasonal downstream connectivity is confirmed. Includes the stream channel, and a 300-ft buffer on both sides of the channel (e.g., 300-ft left bank + 10-ft channel + 300-ft right bank = 610 ft total width of unoccupied stream zone).
- “Connectivity” of unoccupied stream zones includes intermittent and perennial streams, either upstream or downstream, with a direct connection to occupied stream zones or critical habitat within a 6<sup>th</sup> HUC. When a project occurs near the downstream pour point of a 6<sup>th</sup> HUC consider connectivity for the downstream adjoining 6<sup>th</sup> HUC’s. Connectivity is viewed in two ways: 1) no known barriers exist to prevent a fish from accessing an unoccupied stream zone; and 2) intermittent or perennial streams, reservoirs, ponds, lakes with the potential to deliver sediment, nutrients, or contaminants to an occupied stream zone or critical habitat.
- The lateral extent of “Designated Critical Habitat” for bull trout on a designated stream reach, is the width of the stream channel as defined by its ordinary high-water line which is defined by the U.S. Army Corps of Engineers (COE) in 33 CFR 329.11. In areas for which ordinary high-water has not been defined, the width of the stream channel shall be defined by its bankfull elevation. Adjacent floodplains are not designated as critical habitat. The lateral extent of lakes and reservoirs is defined by the perimeter of the water body as mapped on standard 1:24,000 scale maps (comparable to the scale of a 7.5 minute USGS Quadrangle topographic map).
- “Buffer widths” on occupied and unoccupied stream zones incorporate the following on both sides of a stream: riparian management zone, a distance equal to two site-potential trees, or 300-ft slope distance. The buffer width is 150-ft from the perimeter for wetland management zone (see Appendix D, CM-3 and CM-4, respectively).
- The term, “adjacent to”, an occupied or unoccupied stream zone refers to being within the buffer width, a 300-ft slope distance.
- In western Montana, “riparian site-potential tree height” is 100 to 150 ft, in 125 to 150 years (Robert Logar, NRCS, personal communication), depending on the location and species.

## Screen Directions

- Consult the FWS Threatened and Endangered Species lists by county, the FWS maps for bull trout distribution or critical habitat, and the list of occupied 6<sup>th</sup> HUCs (Appendix E) to determine bull trout occupied or unoccupied streams in the project area.

T&E species list by MT county:

[http://www.fws.gov/montanafieldoffice/Endangered\\_Species/Listed\\_Species/countylist.pdf](http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species/countylist.pdf)

Maps of bull trout distribution and designated critical habitat for Montana:

<http://www.fws.gov/mountain-prairie/species/fish/bulltrout/>

- Contact the respective Area Biologist with any questions regarding the FWS species lists, the designations of occupied versus unoccupied streams, and Not Likely to Adversely Affect (NLAA) or Likely to Adversely Affect (LAA) determinations (e.g., a practice is identified that will occur within the buffer width where it has been determined LAA).
- When the determination is NO EFFECT (NE) for all practices, document the NE determination and associated reasoning on the project CPA-52. There is no need to continue beyond this step in documenting practice effects on bull trout or consult with the FWS for projects where all practices will have NE on bull trout.
- When **BOTH** NO EFFECT and NOT LIKELY TO ADVERSELY AFFECT determinations are identified, document **ALL** determinations and associated reasoning on the project CPA-52 and CPA-185 (consultation summary sheet); any additional listed threatened or endangered species in the project area with a NLAA determinations will be documented on the same CPA-185 (or additional sheets) for the project in question.
- NO EFFECT determinations (i.e., the CPA-52) will be reviewed and signed by a Designated Conservationist.
- MAY AFFECT, NOT LIKELY TO ADVERSELY AFFECT determinations (i.e., CPA-52, each listed species habitat determination screen, and CPA-185) will be reviewed and signed, respectively, by an Area Biologist.
- MAY AFFECT, LIKELY TO ADVERSELY AFFECT determinations (i.e., CPA-52, each listed species habitat determination screen, and CPA-185) will be reviewed and signed, respectively, by the State Biologist.

## Habitat Determination Screen for Bull Trout

### COMPLETE A DETERMINATION FOR BOTH BULL TROUT AND CRITICAL HABITAT

#### **FACTOR 1: Bull trout occupied streams or designated critical habitat present in the county.**

Are bull trout or designated critical habitat listed by the US Fish and Wildlife Service (FWS) for the county?

**No** Project will have **NO EFFECT** on bull trout; document in CPA-52.

**Yes** GO TO Factor 2 for additional bull trout habitat determination factors.

#### **FACTOR 2: Occupied versus unoccupied stream zones.**

**Note:** See definitions of “occupied stream zone” and “unoccupied stream zone” above.

**Step 1:** Does the project site occur in an occupied stream zone?

An occupied stream indicates there is a bull trout local population in the 6<sup>th</sup> HUC

There is a known local population of bull trout, and therefore bull trout habitat when:

1. Project is located in one of the sub-watersheds in Appendix E Table E -1 as having a local population;

OR

2. Project can be located on the bull trout distribution map and is in or adjacent to a stream with spawning and rearing habitat.

**Note:** Spawning and rearing habitat indicated as red stream segments on bull trout distribution map; there is increased concern for sediment delivery and/or disturbance of spawning fish.

OR

3. Project can be located on the bull trout distribution map and is in or adjacent to a stream with foraging, migrating, or over-wintering habitat.

**Note:** Foraging, migrating, or over-wintering habitat indicated as yellow stream segments on bull trout distribution map; there is increased concern for elevated temperature and/or disturbance of migrating fish.

**No** GO TO Factor 2 – Step 2, to determine if the project is in an unoccupied stream zone.

**Yes** The project is in a 6<sup>th</sup> HUC with a local population of bull trout.

GO TO Factor 3 to determine if project is in designated critical habitat, AND

GO TO Appendix C to determine if specific Conservation Measures are required to arrive at a May Affect, Not Likely to Adversely Affect determination, prior to practice implementation. This step specifically addresses impacts to bull trout.

**FACTOR 2: Occupied versus unoccupied stream zones.**

**Step 2:** Does the project site occur in an unoccupied stream zone?

**Note:** See definition of “connectivity” above.

An unoccupied stream has connectivity to an occupied stream, and is determined within the 6<sup>th</sup> HUC where the project occurs.

**Note:** Unoccupied habitat includes intermittent and perennial streams, either upstream or downstream, with connectivity to occupied streams or critical habitat. Unoccupied streams are important in that they may provide refugia, and if upstream can deliver sediment, contaminants, or nutrients to downstream occupied habitat.

1. Project is located in one of the sub-watersheds in Appendix E Table E -1, can be located on the bull trout distribution map and is in or adjacent to a stream with connectivity to (upstream or downstream ) a stream with spawning and rearing habitat;

**Note:** Unspecified occupancy is indicated as green stream segments and unoccupied is indicated as blue-gray. Both are considered as unoccupied streams.

OR

2. Project can be located on the bull trout distribution map and is in or adjacent to a stream with connectivity to (upstream or downstream) either a stream with spawning and rearing habitat, **OR** a stream with foraging, migrating, or over-wintering habitat.

**Note:** Spawning and rearing habitat indicated as red stream segments.

**Note:** Foraging, migrating, or over-wintering habitat indicated as yellow stream segments.

**No** Project will have **NO EFFECT** on bull trout; document in CPA-52.

**Yes** The potential project is likely to occur in an unoccupied stream zone with connectivity to occupied stream zones or designated critical habitat.

GO TO Factor 3 to determine if project is in designated critical habitat, AND

GO TO Appendix C to determine if specific Conservation Measures are required to arrive at a May Affect, Not Likely to Adversely Affect determination, prior to practice implementation. This step specifically addresses impacts to bull trout.

**FACTOR 3: Designated bull trout critical habitat.**

Consult bull trout designated critical habitat map(s).

**Note:** The FWS published a final rule for the revised designation of critical habitat for bull trout in the coterminous United States on October 18, 2010 (Federal Register 75(200):63898-64070).

Obtain designated critical habitat maps from the FWS bull trout home page at [http://www.fws.gov/pacific/bulltrout/CH2010\\_Maps.cfm](http://www.fws.gov/pacific/bulltrout/CH2010_Maps.cfm) by selecting Unit 30 – Kootenai River Basin, Unit 31 – Clark Fork River Basin, or Unit 32 – St Mary River Basin. Each Critical Habitat Unit is comprised of sub-units, which approximate river drainages and core bull trout populations. Select from the list of maps for your project area.

1. Project can be located on the designated critical habitat map and is in or adjacent to spawning and rearing habitat.

**Note:** Spawning and rearing habitat indicated as green stream segments; this distinction is important where potential for adverse modification is determined.

OR

2. Project can be located on the designated critical habitat map and is in or adjacent to foraging, migrating, or over-wintering habitat;

**Note:** Foraging, migrating, or over-wintering habitat indicated as orange stream segments; this distinction is important where potential for adverse modification is determined.

OR

3. Projects in unoccupied stream zones with connectivity to downstream occupied stream zones;

**No** **NO EFFECT**, project site is not in or adjacent to bull trout critical habitat; document in CPA-52.

**Yes** All factors indicate that the potential project is in, adjacent to, or has connectivity to bull trout critical habitat.

GO TO Appendix C to determine if specific Conservation Measures are required to arrive at a May Affect, Not Likely to Adversely Affect determination, prior to practice implementation. This step specifically addresses impacts to designated critical habitat.

Where potential for adverse modification to critical habitat is determined, note on the following page the habitat indicators from Appendix C Table C-1, and Appendix F Table F-1. These habitat indicators must be addressed in a narrative summary (see examples in Appendix F, Matrix Pathways/Indicators and Critical Habitat Crosswalk).

