

Bull Trout Final Critical Habitat Justification: Rationale for Why Habitat is Essential, and Documentation of Occupancy

Chapter 14. Mid-Columbia Recovery Unit —Walla Walla River Critical Habitat Unit

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Chapter 14. Walla Walla River Critical Habitat Unit

The Walla Walla River CHU is essential to the conservation of bull trout because it contains a discrete population of bull trout in the southeastern part of the Mid-Columbia RU with connectivity to FMO habitat in the Columbia River and the potential to interact with bull trout from other CHSUs. The fluvial population in the Walla Walla River is particularly significant because of its size and documented movement of bull trout into the Columbia River (see Appendix 1 for more detailed information).

The Walla Walla River basin CHU straddles the Oregon/Washington state line in the eastern part of both states and includes two Critical Habitat Sun-Units (CHSUs); the Walla Walla and Touchet. The Walla Walla River flows out of the Blue Mountains in northeastern Oregon and southeastern Washington and into the Columbia River above McNary Dam. The Touchet River is the largest tributary to the Walla Walla River. There are five known bull trout local populations in this unit; two in the Walla Walla River basin and three in the Touchet River basin. The Bull Trout Draft Recovery Plan indicates the need to maintain these local populations to provide for the recovered distribution of bull trout. The Walla Walla River core area is a stronghold population with fluvial and resident bull trout populations across diverse terrain. This CHU has potential to recover and is essential to the recovery of bull trout in the Middle Columbia / Snake Recovery Unit. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) owns lands in this CHU.

Rationale for determining Critical Habitat based on the Seven Guiding Principles

1. *Conserve opportunity for diverse life-history expression* – Both fluvial and resident bull trout life-history forms occur in the Walla Walla and Touchet river basins. The fluvial population in the Walla Walla River is particularly significant because of its size and the documented movement of bull trout into the Columbia River. Recent and ongoing restoration actions to improve habitat in the lower river are expected to improve conditions for maintaining and enhancing the fluvial populations in these basins.
2. *Conserve opportunity for genetic diversity* – Bull trout from the Walla Walla River Basin are part of the “Inland” lineage (Spruell and Allendorf 1997).
3. *Ensure bull trout are distributed across representative habitats* – The Walla Walla River Basin contains stream habitats representative of the Blue Mountains. Because of its large size and varied terrain, the basin encompasses a wide variety of habitat conditions.
4. *Ensure sufficient connectivity among populations* – Along the Columbia River, the Walla Walla River is in an important location above the Umatilla River and immediately downstream of the Snake River and Yakima River. The loss of this population would greatly reduce the potential for connectivity between populations in the Snake River and the Columbia River. Bull trout in the Walla Walla River basin have been observed moving into the Columbia River.
5. *Ensure sufficient habitat to support population viability (e.g., abundance, trend indices)* – Substantial amounts of suitable habitat are present in the Walla Walla River Basin and significant efforts are underway to restore the lower river to improve foraging, migrating and overwintering habitat. Conditions in this basin, particularly in the upper Walla Walla River, are good for population recovery.

6. *Consider threats (e.g., climate change)* – The large size and diversity of Walla Walla River Basin should increase its resiliency to the affects of climate change. The almost complete absence of brook trout in the Walla Walla River increases the recovery potential of bull trout in this basin.

7. *Ensure sufficient redundancy in conserving population units* – The Walla Walla River Basin is a major stronghold for bull trout in the middle Columbia River region. Its relatively large population is essential to the recovery of bull trout in this region.

14.1. Walla Walla River Critical Habitat Subunit

The Walla Walla River CHSU is essential to the conservation of bull trout because it contains stream habitats representative of the Blue Mountains and, because of its large size and varied terrain, the basin encompasses a wide variety of habitat conditions. Losing this population would greatly reduce the potential for connectivity between populations in the Snake and Columbia Rivers. Conditions in this basin, particularly in the upper Walla Walla River, are good for population recovery. The large size and diversity of Walla Walla River Basin should increase its resiliency to the affects of climate change. The almost complete absence of brook trout in the Walla Walla River increases the recovery potential of bull trout in this basin. The Walla Walla River Basin is a major stronghold for bull trout in the Mid-Columbia River region. Its relatively large population is essential to the recovery of bull trout in this region (see Appendix 1 for more detailed information).

This CHU supports two local bull trout populations in the Walla Walla River basin.

Landownership within the CHSU is approximately 28 percent Federal, 69 percent private, and 3 percent State. The stream segments that make up the Walla Walla CHSU are described below.

The following water bodies are included in this CHSU (Table 45)

Walla Walla River from its confluence with the Columbia River upstream 81.2 km (50.5 mi) to the South Fork/North Fork confluence is overwintering habitat, and an important migratory connection to essential FMO habitat in the Columbia River. Information is limited on bull trout use of the lower river downstream of the Burlingame Diversion Dam, however, tagged fish have been observed moving downstream past the Oasis Road Bridge to the Columbia River (Anglin et al. 2008) and the reach is an important migratory connection to the Columbia River and the Touchet River. The greatest concentration of overwintering bull trout are in the mainstem Walla Walla River between Burlingame Diversion Dam and Cemetery Bridge. A radio telemetry study found many fluvial bull trout overwintering in the upper end of this reach, between the Oregon/Washington state line and Cemetery Bridge (Mahoney et al. 2006). Large irrigation diversions just above Cemetery Bridge (i.e., the Eastside and Little Walla Walla River diversions) greatly reduce stream flows in this reach during the irrigation season (April to October), which may influence downstream fish movements. It is essential to maintain a migratory corridor down to the confluence with Mill Creek to allow for genetic interchange between the Mill Creek and Upper Walla Walla local populations. The Walla Walla River from Cemetery Bridge upstream to the North Fork/South Fork confluence provides year-round subadult rearing habitat and adult overwintering habitat. This reach is heavily used by fluvial bull trout that spawn in the South Fork Walla Walla River (Mahoney et al. 2006).

Couse Creek from the confluence of the Walla Walla River upstream 9.2 km (5.7 mi) is overwintering habitat and an important migratory connection to essential FMO habitat in the Columbia River.

North Fork Walla Walla River from its confluence with the South Fork Walla Walla River upstream 19 km (11.8 mi) is used as FMO habitat. Bull trout subadults and juveniles have been observed in the lower North Fork, and a 2001-2004 radio telemetry study detected multiple adults in lower and middle sections of the North Fork from December through May (Mahoney et al. 2006, pg 102).

South Fork Walla Walla River and its tributaries from its confluence with the North Fork upstream 40.4 km (mi 25.1) includes 5.8 km (3.6 mi) of FMO habitat and 41.2 km (25.6 mi) of spawning and rearing habitat. The South Fork Walla Walla River and its tributaries (listed below) constitute a major bull trout stronghold (Al-Chokhachy and Budy 2008, Anglin et al. 2008, Mahoney et al. 2006). Well over 100 bull trout redds have been observed annually in spawning surveys conducted since 1994, and over 300 redds have been detected annually since 1999 (ODFW in litt. 2002).

Skiphorton Creek from its confluence with the South Fork Walla Walla River upstream 2.6 km (1.6 mi) provides spawning and rearing habitat (Anglin et al. 2008, ODFW in litt. 2002).

Reser Creek from its confluence with the South Fork Walla Walla River upstream 1.8 km (1.1 mi) provides spawning and rearing habitat (Anglin et al. 2008, ODFW in litt. 2002).

Husky Spring Creek from its confluence with the South Fork Walla Walla River upstream 2.3 km (1.4 mi) provides spawning and rearing habitat (ODFW in litt. 2002).

Mill Creek from its confluence with the Walla Walla River upstream 41.1 km (25.6 mi) is FMO habitat for adult bull trout, as well as connectivity to the Walla Walla and upper Mill Creek contains 12.8 km (7.9 mi) of spawning and rearing habitat that supports an important bull trout local population (Mendel et al. 2007). Studies indicate that many fluvial bull trout overwinter in lower Mill Creek between the Bennington Lake Dam and the City of Walla Walla Intake Dam, particularly in the section of above Blue Creek (Mendel et al. 2007). Most of the radio-tagged fish were located in the vicinity of the intake dam. Upper Mill Creek (including the tributaries listed) supports a significant bull trout local population. Over 120 redds have been counted annually in Upper Mill Creek and its tributaries from 1998 to 2005, with a high of 220 redds in 2001; redd numbers dropped to below 90 in 2006 and 2007 (Mendel et al. 2007). The total number of redds per kilometer was 5.5 (8.9 per mile) in 1998 and 10.5 (16.9 per mile) in 1999 (Coyle et al. 2000).

Blue Creek from its confluence with Mill Creek upstream 3.9 km (2.4 mi) provides FMO habitat (Mendel et al. 2007).

Henry Canyon from its confluence with Mill Creek upstream 8.5 km (5.3 mi) provides FMO habitat (Mendel et al. 2007).

Low Creek from its confluence with Mill Creek upstream 3.2 km (2.0 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Paradise Creek from its confluence with Mill Creek upstream 3.1 km (1.9 mi) provides spawning and rearing habitat (Mendel et al. 2007).

North Fork Mill Creek from its confluence with Mill Creek upstream 0.8 km (0.5 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Deadman Creek from its confluence with Mill Creek upstream 2.1 km (1.3 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Burnt Fork Creek from its confluence with Mill Creek upstream 0.6 km (0.4 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Green Fork Creek from its confluence with Mill Creek upstream 1.2 km (0.7 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Bull Creek from its confluence with Mill Creek upstream 0.7 km (0.4 mi) provides spawning and rearing habitat (Mendel et al. 2007).

Yellowhawk Creek from its confluence with the Walla Walla River upstream 13.7 km (8.5 mi) to its confluence with Mill Creek provides foraging and overwintering habitat for adult bull trout as well as connectivity to the Walla Walla River. (Mendel et al. 2007).

Table 45. Water body segments designated as critical habitat for bull trout, including documentation of occupancy and site-specific rationale in the Walla Walla River Basin–Walla Walla River CHU/CHSU

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Walla Walla River	Blue Creek	WA	Blue Creek from its confluence with Mill Creek upstream 3.9 km (2.4 mi) provides FMO habitat (Mendel et al. 2007).	See CHU text	1181536 460611
Walla Walla River Basin–Walla Walla River	Bull Creek	WA	Bull Creek from its confluence with Mill Creek upstream 0.7 km (0.4 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1179465 460292
Walla Walla River Basin–Walla Walla River	Burnt Fork Creek	WA	Burnt Fork Creek from its confluence with Mill Creek upstream 0.6 km (0.4 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1179523 460319
Walla Walla River Basin–Walla Walla River	Couse Creek	OR	Couse Creek from the confluence of the Walla Walla River upstream 9.2 km (5.7 mi) is overwintering habitat and an important migratory connection to essential FMO habitat in the Columbia River.	See CHU text	1183707 459103
Walla Walla River Basin–Walla Walla River	Deadman Creek	WA	Deadman Creek from its confluence with Mill Creek upstream 2.1 km (1.3 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1179550 460323
Walla Walla River Basin–Walla Walla River	Green Fork Creek	WA	Green Fork Creek from its confluence with Mill Creek upstream 1.2 km (0.7 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1179484 460292
Walla Walla River Basin–Walla Walla River	Henry Canyon	OR	Henry Canyon from its confluence with Mill Creek upstream 8.5 km (5.3 mi) provides FMO habitat (Mendel et al. 2007).	See CHU text	1180905 459884
Walla Walla River Basin–Walla Walla River	Husky Spring Creek	OR	Husky Spring Creek from its confluence with the South Fork Walla Walla River upstream 2.3 km (1.4 mi) provides spawning and rearing habitat (ODFW in litt. 2002).	See CHU text	1179783 458836
Walla Walla River Basin–Walla Walla River	Low Creek	OR	Low Creek from its confluence with Mill Creek upstream 3.2 km (2.0 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1180361 459926

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin—Walla Walla River	Mill Creek	OR	Mill Creek from its confluence with the Walla Walla River upstream 41.1 km (25.6 mi) is FMO habitat for adult bull trout, as well as connectivity to the Walla Walla and upper Mill Creek contains 12.8 km (7.9 mi) of spawning and rearing habitat that supports an important bull trout local population (Mendel et al. 2007). Studies indicate that many fluvial bull trout overwinter in lower Mill Creek between the Bennington Lake Dam and the City of Walla Walla Intake Dam, particularly in the section of above Blue Creek (Mendel et al. 2007). Most of the radio-tagged fish were located in the vicinity of the intake dam. Upper Mill Creek (including the tributaries listed) supports a significant bull trout local population. Over 120 redds have been counted annually in Upper Mill Creek and its tributaries from 1998 to 2005, with a high of 220 redds in 2001; redd numbers dropped to below 90 in 2006 and 2007 (Mendel et al. 2007). The total number of redds per kilometer was 5.5 (8.9 per mile) in 1998 and 10.5 (16.9 per mile) in 1999 (Coyle et al. 2000).	See CHU text	1184778 460386
Walla Walla River Basin—Walla Walla River	North Fork Mill Creek	WA	North Fork Mill Creek from its confluence with Mill Creek upstream 0.8 km (0.5 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1179955 460215
Walla Walla River Basin—Walla Walla River	North Fork Walla Walla River	OR	North Fork Walla Walla River from its confluence with the South Fork Walla Walla River upstream 19 km (11.8 mi) is used as FMO habitat. Bull trout subadults and juveniles have been observed in the lower North Fork, and a 2001-2004 radio telemetry study detected multiple adults in lower and middle sections of the North Fork from December through May (Mahoney et al. 2006, pg 102).	See CHU text	1183076 458986
Walla Walla River Basin—Walla Walla River	Paradise Creek	OR	Paradise Creek from its confluence with Mill Creek upstream 3.1 km (1.9 mi) provides spawning and rearing habitat (Mendel et al. 2007).	See CHU text	1180179 460044
Walla Walla River Basin—Walla Walla River	Reser Creek	OR	Reser Creek from its confluence with the South Fork Walla Walla River upstream 1.8 km (1.1 mi) provides spawning and rearing habitat (Anglin et al. 2008, ODFW in litt. 2002).	See CHU text	1179856 458763

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CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Walla Walla River	Skiphorton Creek	OR	Skiphorton Creek from its confluence with the South Fork Walla Walla River upstream 2.6 km (1.6 mi) provides spawning and rearing habitat (Anglin et al. 2008, ODFW in litt. 2002).	See CHU text	1180253 458517
Walla Walla River Basin–Walla Walla River	South Fork Walla Walla River	OR	South Fork Walla Walla River and its tributaries from its confluence with the North Fork upstream 40.4 km (mi 25.1) includes 5.8 km (3.6 mi) of FMO habitat and 41.2 km (25.6 mi) of spawning and rearing habitat. The South Fork Walla Walla River and its tributaries (listed below) constitute a major bull trout stronghold (Al-Chokhachy and Budy 2008, Anglin et al. 2008, Mahoney et al. 2006). Well over 100 bull trout redds have been observed annually in spawning surveys conducted since 1994, and over 300 redds have been detected annually since 1999 (ODFW in litt. 2002).	See CHU text	1183076 458985

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin—Walla Walla River	Walla Walla River	OR / WA	Walla Walla River from its confluence with the Columbia River upstream 81.2 km (50.5 mi) to the South Fork/North Fork confluence is overwintering habitat, and an important migratory connection to essential FMO habitat in the Columbia River. Information is limited on bull trout use of the lower river downstream of the Burlingame Diversion Dam, however, tagged fish have been observed moving downstream past the Oasis Road Bridge to the Columbia River (Anglin et al. 2008) and the reach is an important migratory connection to the Columbia River and the Touchet River. The greatest concentration of overwintering bull trout are in the mainstem Walla Walla River between Burlingame Diversion Dam and Cemetery Bridge. A radio telemetry study found many fluvial bull trout overwintering in the upper end of this reach, between the Oregon/ Washington state line and Cemetery Bridge (Mahoney et al. 2006). Large irrigation diversions just above Cemetery Bridge (i.e., the Eastside and Little Walla Walla River diversions) greatly reduce stream flows in this reach during the irrigation season (April to October), which may influence downstream fish movements. It is essential to maintain a migratory corridor down to the confluence with Mill Creek to allow for genetic interchange between the Mill Creek and Upper Walla Walla local populations. The Walla Walla River from Cemetery Bridge upstream to the North Fork/South Fork confluence provides year-round subadult rearing habitat and adult overwintering habitat. This reach is heavily used by fluvial bull trout that spawn in the South Fork Walla Walla River (Mahoney et al. 2006).	See CHU text	1189393 460624
Walla Walla River Basin—Walla Walla River	Yellowhawk Creek	WA	Yellowhawk Creek from its confluence with the Walla Walla River upstream 13.7 km (8.5 mi) to its confluence with Mill Creek provides foraging and overwintering habitat for adult bull trout as well as connectivity to the Walla Walla River. (Mendel et al. 2007).	See CHU text	1183998 460169

14.2. Touchet River Critical Habitat Subunit

The Touchet River CHSU is essential to the conservation of bull trout because it contains stream habitats representative of the Blue Mountains and, because of its large size and varied terrain, the basin encompasses a wide variety of habitat conditions. Losing this population would greatly reduce the potential for connectivity between populations in the Snake and Columbia Rivers (see Appendix 1 for more detailed information).

The Touchet River is a tributary of the Walla Walla River in southeastern Washington within Columbia and Walla Walla counties. This CHSU supports three bull trout local populations in the Touchet River Basin.

The following water bodies are included in this CHSU (Table 46).

Touchet River from its confluence with the Walla Walla River upstream 78.9 km (49.0 mi) to the confluence with Coppei Creek is unoccupied potential FMO habitat and provides connectivity to FMO habitat in the Walla Walla and Columbia Rivers. The Touchet River from its confluence with Coppei Creek upstream 21.2 km (13.2 mi) to the North Fork/South Fork confluence currently provides important foraging and overwintering habitat for fluvial bull trout that spawn upstream and serves as a migratory corridor to the lower Walla Walla River and Columbia River. Adult and sub-adult bull trout have been captured annually at the steelhead adult trap in Dayton. Trap counts were 20 or more bull trout per year through 2008, with 110 captured in the new fish trap in 2009. Fluvial bull trout are presumed to overwinter downstream of Dayton, but their abundance, distribution and use patterns in this reach have not been determined. Glen Mendel reported that a pit tag from a Touchet River bull trout was identified in the Columbia River in 2009. Data is limited on bull trout use of the lower Touchet River. In 2008, a fish ladder was installed at Hofer Dam, which is expected to greatly improve conditions for upstream fish movement from the lower Walla Walla River up into the Touchet River.

North Fork Touchet River from its confluence with the South Fork Touchet River upstream 32.1 km (19.9 mi) to its headwaters is critical habitat. The lower 24.0 km (14.9 mi) of the North Fork is utilized by bull trout for foraging and overwintering, and it provides connectivity to the South Fork and the mainstem Touchet River. The upper North Fork Touchet River from Spangler Creek upstream 8.1 km (5.0 mi) to its headwaters provides spawning and rearing habitat. Bull trout spawn in the North Fork Touchet River from Bluewood Creek downstream to Spangler Creek. From 1984 through 2001, over 40 redds per year were found in this area (Mendel et al. 2007, pg 78). However, redd numbers have been declining since 2001, with only 15 observed in 2005 and 9 in 2006 (Mendel et al. 2007, pg 78). Rearing of adults, subadults, and age 1+ juveniles occurs in the North Fork from Spangler Creek down to the Wolf Fork confluence. WDFW found bull trout in 59 of 104 sites surveyed from 1998 to 2006, with multiple age classes detected at many of the sites (Mendel et al. 2007).

Lewis Creek from its confluence with the North Fork Touchet River upstream 8.0 km (4.9 mi) is utilized as rearing habitat, but a few redds have been documented in the past. WDFW found bull trout in 16 of 47 sites electrofished from 1998 to 2006 and multiple age classes were observed (Mendel et al. 2007).

Spangler Creek from its confluence with the North Fork Touchet River upstream 6.6 km (4.1 mi) provides spawning and rearing habitat (Mendel et al. 2007, pg 78). Some bull trout

spawning has been documented in Spangler Creek and bull trout were detected at 11 of 17 sites electrofished by WDFW from 1998 to 2006 (Mendel et al. 2007).

Corral Creek from its confluence with the North Fork Touchet River upstream 0.5 km (0.31 mi) provides spawning and rearing habitat (Mendel et al. 2007, pg 78). Young of year bull trout were found in lower Corral Creek during WDFW electrofishing surveys in 2005.

Wolf Fork Touchet River includes 12.4 km (7.7 mi) of FMO habitat and 13.5 km (8.4 mi) of spawning and rearing habitat. The Wolf Fork Touchet River supports the largest local population in the Touchet River Basin. The lower Wolf Fork Touchet River, downstream of Whitney Creek, is utilized by bull trout for foraging and overwintering and provides connectivity to the North Fork and mainstem Touchet River. The current known spawning distribution in the Wolf Fork Touchet River is from Whitney Creek 2.4 km (1.5 mi) upstream of the Forest Service boundary (about 8.8 km / 5.5 mi). From 1994 to 2002, an average of 63 redds per year were found in this area, with a high of 93 redds in 1999 (Mendel et al. 2003). In 2005, 57 redds were found (Mendel, Trump, and Gembala 2006, pg 52), 37 redds were found in 2006, and 38 redds were found in 2007 (Mendel et al. 2007). WDFW detected bull trout at 56 of 82 electrofishing sites sampled from 1998 to 2006, with multiple age classes observed in upper reach areas (Mendel et al. 2007).

Green Fly Canyon from its confluence with Wolf Fork upstream 0.33 km (0.2 mi) provides spawning and rearing habitat (Mendel et al. 2007). Lower Green Fly Creek has multiple age classes of bull trout based on one-pass electrofishing by WDFW (Mendel et al. 2007).

South Fork Touchet River from the confluence with the Walla Walla River upstream 25.8 km (16.0 mi) is FMO habitat and 4.4 km (2.7 mi) of spawning and rearing habitat in the upper reaches. The South Fork Touchet River supports a small local population with spawning occurring in Burnt Fork. WDFW detected bull trout at 3 of 67 sites electrofished on the South Fork from 1998 to 2006 (Mendel et al. 2007). The South Fork Touchet River and Griffin Fork are utilized by fluvial bull trout for foraging and overwintering. A bull trout local population was identified in the Burnt Fork of the South Fork Touchet River in 2000, as evidenced by the presence of three age classes and four redds (Mendel et al. 2007). The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) purchased a large ranch on the South Fork Touchet River (now called the Rainwater Wildlife Area) in 1998, and have taken steps to improve in-stream habitat and acquire additional lands. This area serves as a wildlife mitigation area and is managed for fish and wildlife resources.

Griffin Fork from its confluence with the South Fork Touchet River upstream 0.7 km (0.4 mi) provides FMO habitat. Bull trout have been documented in Griffin Fork by CTUIR personnel, although no redds have been found in this tributary (Mendel et al. 2007, pg 55).

Burnt Fork from its confluence with the South Fork Touchet River upstream 4.4 km (2.7 mi) provides spawning and rearing habitat. Sixteen redds were found in the Burnt Fork in 2001, but only two redds were detected in 2002 (Mendel et al. 2003). Two redds were observed in Burnt Fork in 2005 (Mendel, Trump, and Gembala 2006, pg 56), and in 2008 six live bull trout were observed in the South Fork Touchet River just below Burnt Fork.

Table 46. Water body segments designated as critical habitat for bull trout, including documentation of occupancy and site-specific rationale in the Walla Walla River Basin–Touchet River CHU/CHSU

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Touchet River	Burnt Fork	WA	Burnt Fork from its confluence with the South Fork Touchet River upstream 4.4 km (2.7 mi) provides spawning and rearing habitat. Sixteen redds were found in the Burnt Fork in 2001, but only two redds were detected in 2002 (Mendel et al. 2003). Two redds were observed in Burnt Fork in 2005 (Mendel, Trump, and Gembala 2006, pg 56), and in 2008 six live bull trout were observed in the South Fork Touchet River just below Burnt Fork.	See CHU text	1179853 461054
Walla Walla River Basin–Touchet River	Corral Creek	WA	Corral Creek from its confluence with the North Fork Touchet River upstream 0.5 km (0.31 mi) provides spawning and rearing habitat (Mendel et al. 2007, pg 78). Young of year bull trout were found in lower Corral Creek during WDFW electrofishing surveys in 2005.	See CHU text	1179588 463015
Walla Walla River Basin–Touchet River	Green Fly Canyon	WA	Green Fly Canyon from its confluence with Wolf Fork upstream 0.33 km (0.2 mi) provides spawning and rearing habitat (Mendel et al. 2007). Lower Green Fly Creek has multiple age classes of bull trout based on one-pass electrofishing by WDFW (Mendel et al. 2007).	See CHU text	1178750 461426
Walla Walla River Basin–Touchet River	Griffin Fork	WA	Griffin Fork from its confluence with the South Fork Touchet River upstream 0.7 km (0.4 mi) provides FMO habitat. Bull trout have been documented in Griffin Fork by CTUIR personnel, although no redds have been found in this tributary (Mendel et al. 2007, pg 55).	See CHU text	1179735 461208
Walla Walla River Basin–Touchet River	Lewis Creek	WA	Lewis Creek from its confluence with the North Fork Touchet River upstream 8.0 km (4.9 mi) is utilized as rearing habitat, but a few redds have been documented in the past. WDFW found bull trout in 16 of 47 sites electrofished from 1998 to 2006 and multiple age classes were observed (Mendel et al. 2007).	See CHU text	1178236 461906

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Touchet River	North Fork Touchet River	WA	North Fork Touchet River from its confluence with the South Fork Touchet River upstream 32.1 km (19.9 mi) to its headwaters is critical habitat. The lower 24.0 km (14.9 mi) of the North Fork is utilized by bull trout for foraging and overwintering, and it provides connectivity to the South Fork and the mainstem Touchet River. The upper North Fork Touchet River from Spangler Creek upstream 8.1 km (5.0 mi) to its headwaters provides spawning and rearing habitat. Bull trout spawn in the North Fork Touchet River from Bluewood Creek downstream to Spangler Creek. From 1984 through 2001, over 40 redds per year were found in this area (Mendel et al. 2007, pg 78). However, redd numbers have been declining since 2001, with only 15 observed in 2005 and 9 in 2006 (Mendel et al. 2007, pg 78). Rearing of adults, subadults, and age 1+ juveniles occurs in the North Fork from Spangler Creek down to the Wolf Fork confluence. WDFW found bull trout in 59 of 104 sites surveyed from 1998 to 2006, with multiple age classes detected at many of the sites (Mendel et al. 2007).	See CHU text	1179588 463015
Walla Walla River Basin–Touchet River	South Fork Touchet River	WA	South Fork Touchet River from the confluence with the Walla Walla River upstream 25.8 km (16.0 mi) is FMO habitat and 4.4 km (2.7 mi) of spawning and rearing habitat in the upper reaches. The South Fork Touchet River supports a small local population with spawning occurring in Burnt Fork. WDFW detected bull trout at 3 of 67 sites electrofished on the South Fork from 1998 to 2006 (Mendel et al. 2007). The South Fork Touchet River and Griffin Fork are utilized by fluvial bull trout for foraging and overwintering. A bull trout local population was identified in the Burnt Fork of the South Fork Touchet River in 2000, as evidenced by the presence of three age classes and four redds. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) purchased a large ranch on the South Fork Touchet River (now called the Rainwater Wildlife Area) in 1998, and have taken steps to improve in-stream habitat and acquire additional lands. This area serves as a wildlife mitigation area and is managed for fish and wildlife resources.	See CHU text	1179588 463025

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CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Touchet River	Spangler Creek	WA	Spangler Creek from its confluence with the North Fork Touchet River upstream 6.6 km (4.1 mi) provides spawning and rearing habitat (Mendel et al. 2007, pg 78). Some bull trout spawning has been documented in Spangler Creek and bull trout were detected at 11 of 17 sites electrofished by WDFW from 1998 to 2006 (Mendel et al. 2007).	See CHU text	1178063 461487
Walla Walla River Basin–Touchet River	Touchet River	WA	Touchet River from its confluence with the Walla Walla River upstream 78.9 km (49.0 mi) to the confluence with Coppei Creek is unoccupied potential FMO habitat and provides connectivity to FMO habitat in the Walla Walla and Columbia Rivers. The Touchet River from its confluence with Coppei Creek upstream 21.2 km (13.2 mi) to the North Fork/South Fork confluence currently provides important foraging and overwintering habitat for fluvial bull trout that spawn upstream and serves as a migratory corridor to the lower Walla Walla River and Columbia River. Adult and sub-adult bull trout have been captured annually at the steelhead adult trap in Dayton. Trap counts were 20 or more bull trout per year through 2008, with 110 captured in the new fish trap in 2009. Fluvial bull trout are presumed to overwinter downstream of Dayton, but their abundance, distribution and use patterns in this reach have not been determined. Glen Mendel reported that a pit tag from a Touchet River bull trout was identified in the Columbia River in 2009. Data is limited on bull trout use of the lower Touchet River. In 2008, a fish ladder was installed at Hofer Dam, which is expected to greatly improve conditions for upstream fish movement from the lower Walla Walla River up into the Touchet River.	See CHU text	1186823 460337

CHU—CHSU	Water Body Name	State	Information Documenting Bull Trout Occupancy	Essential Habitat Rationale	LLID
Walla Walla River Basin–Touchet River	Wolf Fork Touchet River	WA	<p>Wolf Fork Touchet River includes 12.4 km (7.7 mi) of FMO habitat and 13.5 km (8.4 mi) of spawning and rearing habitat. The Wolf Fork Touchet River supports the largest local population in the Touchet River Basin. The lower Wolf Fork Touchet River, downstream of Whitney Creek, is utilized by bull trout for foraging and overwintering and provides connectivity to the North Fork and mainstem Touchet River. The current known spawning distribution in the Wolf Fork Touchet River is from Whitney Creek 2.4 km (1.5 mi) upstream of the Forest Service boundary (about 8.8 km / 5.5 mi). From 1994 to 2002, an average of 63 redds per year were found in this area, with a high of 93 redds in 1999 (Mendel et al. 2003). In 2005, 57 redds were found (Mendel, Trump, Gembala, et al. 2006, pg 52), 37 redds were found in 2006, and 38 redds were found in 2007 (Mendel et al. 2007). WDFW detected bull trout at 56 of 82 electrofishing sites sampled from 1998 to 2006, with multiple age classes observed in upper reach areas (Mendel et al. 2007).</p>	See CHU text	1178953 462742