BIOLOGICAL ASSESSMENT-BIOLOGICAL EVALUATION

(Aquatic Species)

For The

Northern Utah Aspen Restoration Project

Ashley National Forest
And
Uinta-Wasatch-Cache National Forest
November 7, 2019

/s/ Ron Brunson

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Date

Biological Assessment for the Northern Utah Aspen Restoration Project on the Ashley National Forest and the Uinta-Wasatch-Cache National Forest

INTRODUCTION

The purpose of this Biological Assessment (BA) is to identify the likely effects that the proposed Northern Utah Aspen Restoration Project on the Ashley National Forest and Uinta-Wasatch-Cache National Forest (Two Forests) would have on U. S. Fish and Wildlife Service (FWS) designated Proposed, Endangered, Threatened, or Candidate aquatic species. This Biological Assessment addresses those species that: 1) are known to occur on the Two Forests based on confirmed sightings, 2) may occur on the Two Forests based on geographic range, 3) there exists suitable habitat for the species to be found on the Two Forests, or 4) have habitat adjacent to the Two Forests which may be impacted by activities on the Forests.

The USFWS maintains the current list of threatened, endangered, proposed, and candidate species that receive protection under the Endangered Species Act (ESA). There are four fish species listed for Duchesne, Uintah and Daggett Counties that have habitat adjacent to the Ashley National Forest which may be impacted by activities on the Forest. A description of these species, their suitable habitat, and determination of impact is found in Table 1. There are no aquatic species listed that occur of have habitat adjacent to the Uinta-Wasatch-Cache National Forest.

Purpose and Need

Desired conditions for aspen on the Forests include a heterogeneous mosaic of age classes, with young, mid, and old age classes represented across the landscape. Aspen regeneration should be sufficient to withstand browsing pressure from wildlife and livestock and still provide sufficient recruitment to ensure stand maintenance or stand replacement. Seral aspen forests would be maintained by periodic disturbance and would not be converted at large spatial scales to conifer forest due to lack of disturbance. Grass, forb, and shrub growth would be productive, providing forage and browse for both wildlife and livestock. A mosaic of healthy aspen stands of varying age classes across the landscape would provide opportunities to manage future wildfires for resource objectives and to suppress fires with undesirable fire effects. The current state of aspen in northern Utah does not meet these conditions, and there is a need for active restoration treatments.

The purpose of this project is to begin a programmatic approach to restoring aspen forests where an assessment has indicated a need for treatment with consideration of the effects of ungulate or livestock browsing. The goals and objectives of the project are to move aspen forests closer to the desired future conditions and:

1. Increase aspen resilience and improve wildlife habitat by:
    - Increasing the age-class diversity of aspen on the landscape
    - Restoring and maintaining self-replacing aspen stands

2. Increase forest resistance to uncharacteristically large and severe wildfires, and increase opportunities for managing wildfires for natural resource objectives by:
    - Expanding the extent of aspen on the landscape
    - Reducing conifers in aspen-dominated stands to reduce fire intensity

Proposed Action

This project would allow for treatments in any aspen community across the Ashley and UWC National Forests outside of designated Wilderness, approximately 572,142 acres (177,707 acres on the Ashley and 394,435 on the UWC) . Aspen restoration may occur within Inventoried Roadless Areas (IRAs). Any tool or method used to treat aspen would be consistent with the Roadless Rule, including the cutting, sale, or removal of generally small diameter timber and that the cutting, sale, or removal must maintain or improve one or more roadless characteristics. Within any of the Research Natural Areas, no mechanical treatments would be used to treat aspen (fire only).

Over the last ten years (2009-2018), the Ashley and UWC National Forests have treated approximately 21,500 acres of aspen, averaging 2,150 acres per year. Based on the results of implementing these projects, our team is confident that we understand the effects of the proposed treatments when applied under certain conditions. The NEPA analysis considers the effects of each of the treatments that could be implemented based on an existing condition. After the analysis is complete, specific project areas would be identified and on-the-ground assessments would be completed to determine the ecological condition of the aspen stands, the potential for problems with ungulate browsing, and other local factors. Based on the site-specific conditions, the appropriate treatment(s) for the project area would be selected (from the list below). Treatment actions would target the most effective management option and be followed by post-treatment monitoring. Based on the monitoring results, additional management actions (from the list of treatments) may be implemented if needed to achieve restoration objectives.

Actions used to maintain or improve conditions for aspen may include one or more of the following:

1. Prescribed burning (broadcast) that would target aspen and aspen-conifer stands within larger project areas under predetermined weather and fuel conditions (identified in the approved project Burn Plan). Where possible, project areas would be identified to minimize ground disturbance by utilizing existing roads, trails, and terrain to contain the fire. Firelines would be constructed if necessary.
2. Selectively cut conifers, aspen or both using hand crews with chainsaws or ground-based mechanized equipment (i.e. masticator, skid steer, skidder, etc.).
3. Removal of all aspen and conifers using hand crews with chainsaws or ground-based mechanized equipment.
4. Cut material associated with mechanical treatments may be:
    a. Left in place or moved (e.g. to act as physical barriers to protect aspen from browsing or to provide fuel for a later prescribed fire).
    b. Removed, potentially as a commercial sale (e.g. firewood, post and pole, other types of biomass material, and sawlogs).
    c. Hand or mechanically piled and later burned.
    d. Chipped or masticated.
5. Girdling conifers (killing the tree but leaving it standing) within aspen stands.
6. Root separation (breaking up lateral roots at some distance from the parent aspen trees using mechanical equipment).
7. Protection from browsing (including, but not limited to wildlife proof fencing, 6-8’ high).

8. Protection from livestock using permitted grazing practices (e.g. temporarily resting pastures or allotments, or using fencing, water and or supplements to distribute livestock away from aspen stands).
9. Planting aspen and controlling competing vegetation.
10. Inventory and monitoring.
11. No treatment.

At the site-specific project level, the following would be completed and documented in a project file:

- Map of project area
- Pre-treatment aspen assessment (Appendix B)
- Site-specific silvicultural prescription if applicable
- Burn plan if applicable
- Threatened, Endangered and sensitive plant and animal surveys and mitigation strategies
- Cultural resource surveys and mitigation strategies
- Site-specific mitigation measures
- Post-treatment monitoring
- Aspen Implementation Approval Form (Appendix C)

Design Criteria and Review Process

In order to accomplish objectives while also maintaining the appropriate level of resource protection, resource specialists have provided Best Management Practices (BMPs) and project design criteria for each treatment type listed above (Appendix A of the Decision Memo). These BMPs are based on law, regulation, and policy as well as years of experience and professional judgement from implementing these types of projects. This experience has led to years of successful treatment that has not resulted in any extraordinary circumstances.

Forest Service Objectives for Completing a Biological Assessment

Under Forest Service Manual (FSM) 2672.41, the objectives for completing BAs for proposed Forest Service programs or activities within Forest Lands are:

1) To comply with the requirements of the ESA (PL 93-205, as amended) actions of Federal agencies not jeopardize or adversely modify critical habitat of federally listed species.

2) To provide a process and standard by which to ensure that threatened, endangered, candidate, and proposed species receive full consideration in the decision making process, and to enhance opportunities for mitigation.

Forest Service Manual 2600, Section 2671.44 (Supplement 2600-94-2), provides direction on the review of actions and programs authorized, funded or implemented by the Forest Service relative to the requirements of the ESA.

Table 1. Endangered, Threatened, Proposed, and Candidate Species listed for Duchesne Uintah and Daggett Counties and the ANF

Species	Status	Habitat Use and Local Distribution
Bonytail *Gila elegans*	Endangered	Specific habitat requirements of the bonytail are not well known because the species was extirpated from most of its historic range prior to extensive fishery surveys. It is a very rare species in the Colorado River Basin, with only a few individuals having been found in the last decade (USFWS, 2002d). Very low numbers may occur in the Gray Canyon of the Green River, which is approximately 65 miles south of the Project. Critical habitat has been designated for this species within Duchesne County, Utah in the Green and Duchesne Rivers (USFWS, 2006). Suitable aquatic habitats that the bonytail would utilize are not present in the vicinity of project activities. There would be no water depletion from the Upper Colorado River Basin as a result implementing the proposed project. Therefore the Project would have ***"No Effect"*** on the bonytail.
Colorado pikeminnow *Ptychochelius lucius*	Endangered	The range of the Colorado pikeminnow is restricted to the Upper Colorado River basin, upstream of Glen Canyon Dam (USFWS, 2002b). Adult Colorado pikeminnow use a variety of habitat types, depending on time of year, but mainly utilize shoreline runs, eddies, backwater habitats, seasonally flooded bottoms, and side canyons. They are most abundant in the upper Green River (between the mouth of the Yampa River and head of Desolation Canyon) and lower Green River (between the Price and San Rafael Rivers) (USFWS, 2002a). Critical habitat has been designated for these species in the Green River in Carbon, Emery, and Grand Counties (USFWS, 2006). Suitable aquatic habitats that the Colorado pikeminnow would utilize are not present in the vicinity of project activities. There would be no water depletion from the Upper Colorado River Basin as a result of implementing the proposed project. Therefore the Project would have ***"No Effect"*** on the Colorado pikeminnow.
Humpback chub *Gila cypha*	Endangered	Suitable habitat for this fish species is characterized by a wide variety of riverine habitats, especially canyon areas with fast currents, deep pools, and boulder habitat (USFWS, 2002c). This species originally inhabited the main stem of the Colorado River from what is now Lake Mead to the canyon areas of the Green and Yampa River Basins. Currently, the species appears to be restricted to the Colorado River at Black Rocks and Westwater Canyon of the Green River, and Yampa Canyon of the Yampa River (USFWS, 2002c). Suitable aquatic habitats that the

Species	Status	Habitat Use and Local Distribution
		humpback chub would utilize are not present in the vicinity of project activities. There would be no water depletion from the Upper Colorado River Basin as a result of implementing the proposed project. Therefore the Project would have ***"No Effect"*** on the humpback chub.
Razorback sucker *Xyrauchen texanus*	Endangered	This species inhabits warm water reaches of large rivers in areas that include deep runs, eddies, backwaters, and flooded off channel environments (USFWS, 2002d). The largest population is known to occur in the upper Green River between the confluence of the Yampa River and the confluence of the Duchesne River. Adult suckers also occur in the Colorado River near Grand Junction, Colorado, although numbers are very low (USFWS, 2002d). Critical habitat has been designated for this species in the Green River in Carbon, Duchesne, Emery, Uintah, and Grand Counties (USFWS, 2006). Suitable aquatic habitats that the razorback sucker would utilize are not present in the vicinity of project activities. There would be no water depletion from the Upper Colorado River Basin as a result of implementing the proposed project. Therefore the Project would have ***"No Effect"*** on the razorback sucker.
June sucker *Chasmistes liorus*	Endangered	This species is endemic to Utah Lake and the Provo River. . Critical habitat is located in the lower five miles of the Provo River and within Utah Lake. The UWC is outside the critical habitat for June sucker. Identified threats to this species includes water development and competition and predation by nonnative fish species. The major impediment to recruitment and eventual recovery of the species is low survival of early life stages (Anderson et al. 2006). The Proposed Action which includes design criteria to minimize potential effects to water quality upstream in the Provo River drainage, would have ***"No Effect"*** on June sucker populations or habitat.

The humpback chub, bonytail, Colorado pikeminnow, and razorback sucker are all native to the Colorado River Basin (USFWS 2002 a, b, c, and d). Each of these species are listed as endangered by the USFWS and currently do not occur within the Ashley National Forest. There is no suitable habitat in the project area. No new water depletions from the Colorado River Basin would occur as a result of this project. Based on the analyses that were completed for this BA, it was determined that the Proposed Action would have **"No Effect"** on all four Colorado River fish species identified or June Sucker.

Biological Evaluation for the Northern Utah Aspen Restoration Project on the Ashley National Forest and Uinta-Wasatch-Cache National Forest

Forest Service Sensitive Species Policy

The USDA Forest Service has developed policy requirements designation of sensitive plant and animal species (FSM 2670; Supplement 2600-94-2). The Regional Forester's sensitive species list contains taxa only when they meet one or more of the following three criteria: 1) the species is declining in numbers or occurrences, and evidence indicates it could be proposed for federal listing as threatened or endangered if action is not taken to reverse or stop the downward trend, 2) the species' habitat is declining and continued loss could result in population declines that lead to federal listing as threatened or endangered if action is not taken to reverse or stop the decline, and 3) the species' population or habitat is stable but limited.

Forest Service Objectives for Completing a Biological Evaluation (BE)

Under FSM 2672.41, the objectives for completing a BE for proposed Forest Service programs or activities are:

1) To ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species listed as sensitive by Forest Service Region 4.

2) To provide process and standard by which to ensure that threatened, endangered, proposed, and sensitive species receive full consideration in the decision making process, and to enhance opportunities for mitigation.

Current information was reviewed to determine whether any designated FSS are known to occur inside or near the proposed Project Area. Several sources of information were used to identify where listed species have been previously seen, including: Ranger District records, Utah Division of Wildlife Resources data files, U.S. Fish and Wildlife Service (USFWS) documents, and assorted fisheries references. Habitat and life history requirements for the sensitive species were also researched and reviewed.

DESIGNATED FOREST SENSITIVE SPECIES

Four fish and two amphibian species are listed as sensitive by the R4 Regional Forester on the Ashley National Forest and the Uinta-Wasatch-Cache National Forest. These include the Colorado River cutthroat trout *(Oncorhynchus clarkii pleuriticus)*, Bonneville cutthroat trout *(Oncorhynchus clarkia utah)*, Northern leatherside (*Lepedomeda copei)*, Southern leatherside (*Lepedomeda aliciae*), Columbia spotted frog (*Rana luteventris)* and boreal toad *(Bufo boreas boreas)*.

Colorado River cutthroat trout –
Colorado River cutthroat trout (CRCT) are endemic to the Two Forests (Behnke 1992; Figure 1). The CRCT is managed under a multi agency conservation strategy and agreement, which was implemented for protection and conservation of CRCT. Colorado River cutthroat trout currently retain its status as a sensitive species on the Regional Foresters Sensitive Species List. The Two Forest are addressing the needs of CRCT by following the multi-agency CRCT Conservation Agreement. The Forest remains consistent with its Forest Plan by protecting habitat for CRCT.

Bonneville cutthroat trout –
Bonneville cutthroat trout (BCT) are endemic to the Uinta-Wasatch-Cache National Forest (Behnke 1992). The BCT is managed under a Range-wide conservation agreement and strategy, with the purpose of coordinating the implementation of conservation measures for BCT within its historic range (Lentsch et al. 2000). BCT currently retain its status as a sensitive species on the Regional Foresters Sensitive Species List. The UWC is addressing the needs of BCT by following the Utah Conservation Agreement. The Forest remains consistent with its Forest Plan by protecting habitat for BCT.

Northern leatherside –

The historical range of northern leatherside chub encompassed portions of the Bear River drainage at the northeastern margins of the Bonneville Basin in Utah, Idaho and Wyoming, and in tributaries of the Snake River in Idaho, including Goose Creek, the Wood River, and Raft River. This species currently inhabits desert streams in the Bonneville Basin and Snake River drainages.

Threats to Northern leatherside chub include habitat degradation, fragmentation, and loss from water development, stream alterations, and grazing. The introduction of non-native fish predators has also contributed to declines.

Southern leatherside –
Historical observations of Southern leatherside chub are limited to the American Fork, Provo River, and Spanish Fork drainages of the Utah Lake Basin and the San Pitch River, East Fork Sevier River, Beaver River, and the lower, middle, and upper Sevier River drainages of the Sevier River Basin (Utah Division of Natural Resources, 2010).

Boreal toad and Columbia spotted frog –
Boreal toads and Columbia spotted frog are managed under separate multi-agency conservation strategies and agreements. Populations of boreal toad and Columbia spotted

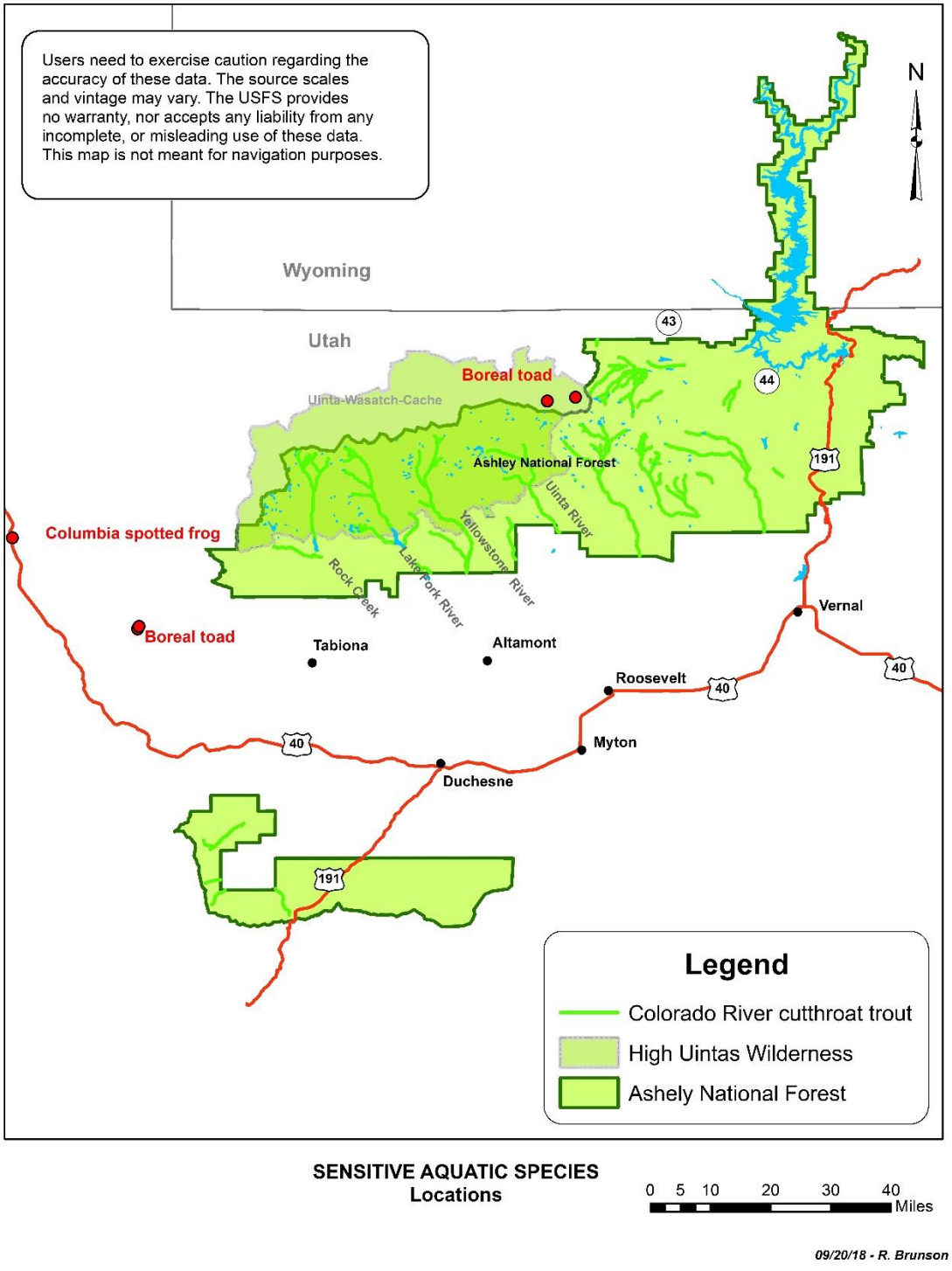
frog occur within or near the proposed project area on the Uinta-Wasatch-Cache National Forest.

There are no known populations of sensitive amphibian species on the Ashley National Forest. However, historical records indicate that boreal toads were once present in many locations on the Uinta Mountains within the ANF. Historical specimens were collected or reported from the Lake Fork River, Spirit Lake, Whiterocks River, Uintah River, and "Uinta Mountains" within the ANF (Day et. al. 1997).

In 2009, Utah Division of Widlife Resources (UDWR) crews observed two adult boreal toads in the Burnt Fork Drainage on the north slope of the Uinta Mountains within the High Uintas Wilderness on the Uinta-Wasatch-Cache National Forest (UWCNF). Two adult and several juvenile boreal toads were observed and photographed by UDWR and UWCNF crews conducting fisheries surveys in the Little West Fork Duchesne River drainage on the south slope of the Uinta Mountains in 2009 (Matt Breen – UDWR pers. comm. 2010). Known spotted frog populations occur in the Provo River drainage and the Heber Valley (Bailey et. al. 2006).

A summary description of habitat requirements, local distribution, and the expected occurrence of these species in the Project Area are provided below.

Figure 1. Ashley National Forest sensitive aquatic species locations – (Colorado River cutthroat trout, boreal toad and Columbia spotted frog).



SENSITIVE AQUATIC SPECIES
Locations

0 5 10 20 30 40 Miles

09/20/18 - R. Brunson

Table 2. Habitat use and local distribution for Forest Sensitive Species (FSS) evaluated for the Proposed Project.

Species	Habitat Use and Local Distribution
Colorado River cutthroat trout *Oncorhynchus clarki pleuriticus*	This species is dependent on perennial, cool, water with moderate to high water quality. Population of Colorado River cutthroat trout occur across the Forest within the Colorado River Basin drainage. All perennial streams are considered suitable habitat. Design Criteria included in the Proposed Action would minimize potential increased sediment delivery to streams. Therefore, the activities of the proposed project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Colorado River cutthroat trout populations and their habitat within the project area or downstream.
Bonneville cutthroat trout *Oncorhynchus clarki utah*	This species is dependent on perennial, cool, water with moderate to high water quality. Populations of Bonneville cutthroat trout occur across the Uinta-Wasatch-Cache National Forest within the Bonneville Basin drainage. All perennial streams are considered suitable habitat. Design Criteria included in the Proposed Action would minimize potential increased sediment delivery to streams. Therefore, the activities of the proposed project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Bonneville cutthroat trout populations and their habitat within the project area or downstream.

Species	Habitat Use and Local Distribution
Northern leatherside *Lepedomeda copei*	Northern leatherside populations occur within the Uinta-Wasatch-Cache National Forest portion of the proposed project area. Design Criteria included in the Proposed Action would minimize potential effects to occupied and suitable habitat. Therefore, the Northern Utah Aspen Regeneration Project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Northern leatherside populations or habitat on the **Uinta-Wasatch-Cache** National Forest.
Southern leatherside *Lepedomeda aliciae*	Historical observations of Southern leatherside chub are limited to the American Fork, Provo River, and Spanish Fork drainages of the Utah Lake Basin and the San Pitch River, East Fork Sevier River, Beaver River, and the lower, middle, and upper Sevier River drainages of the Sevier River Basin (UDWR 2010). There are no historical observations in Weber or Salt Lake Counties or on the Ashley portion of the project area. Design Criteria included in the Proposed Action would minimize potential effects to occupied and suitable habitat. Therefore, the proposed project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Columbia spotted frog populations or habitat on the **Uinta-Wasatch-Cache** National Forest. Activities of the proposed project occurring on the Ashley National Forest would have **"no impact"** to Southern leatherside

Species	Habitat Use and Local Distribution
Boreal toad *Bufo boreas boreas*	The boreal toad inhabits western Canada and much of the western (especially northwestern) United States. It occurs throughout most of Utah, and can be found in a variety of habitats, including slow moving streams, wetlands, desert springs, ponds, lakes, meadows, and woodlands. Boreal toads are noted to be relatively independent of water compared to other amphibians, but must re-hydrate daily (Hogrefe et al. 2005). Because of this, they are highly terrestrial and typically migrate to breeding sites, deposit egg strands, and return to upland burrows. The boreal toad, which is inactive during cold winter months, may either dig its own burrow in loose soil or use the burrows of other small animals. Additionally, burrows represent critical microhabitats for boreal toad and other amphibians, especially in warmer drier climates (Hogrefe et al. 2005). Adults feed on numerous types of small invertebrates, such as ants, beetles, and grasshoppers, whereas larvae (tadpoles) filter algae from the water or feed on detritus. The breeding season of the western toad varies, depending on geographic location. There are no known Boreal toad populations on the Ashley National Forest portion of the proposed project area. Populations and habitat occur on the Uinta-Wasatch-Cache portion of the proposed project area. Design Criteria included in the Proposed Action would minimize potential effects to occupied and suitable habitat. Therefore, the proposed Northern Utah Aspen Regeneration Project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Boreal toad populations or their habitat.

Species	Habitat Use and Local Distribution
Columbia spotted frog *Rana luteiventris*	The Columbia spotted frog range from southeast Alaska through Alberta, Canada, and into Washington, Idaho, Wyoming, Montana, and disjoint areas of Nevada and Utah. In Utah, isolated Columbia spotted frog populations exist in the West Desert and along the Wasatch Front. Habitat degradation and loss have led to declines in many of these populations, especially those along the Wasatch Front, resulting in the inclusion of the species on the Utah Sensitive Species List. With a goal of recovering the Columbia spotted frog, several government agencies, including Forest Service Region 4, are working cooperatively under a Conservation Agreement to eliminate or significantly reduce the threats facing the species. The Columbia spotted frog breeds as early in the spring as winter thaw allows, with eggs hatching in 3-21 days, depending on temperature. The species seems to prefer isolated springs and seeps that have a permanent water source, although individuals are known to move overland in spring and summer after breeding. During cold winter months, spotted frogs burrow in the mud and become inactive. Adult frogs eat a wide variety of food items, ranging from insects to snails, whereas tadpoles eat algae, plants, and small aquatic organisms. The dorsal (back) coloration of the spotted frog ranges from light brown to gray, with varying degrees of spotting. Ventral (belly) coloration ranges from red to yellow. There are no known populations of spotted frogs on the Ashley National Forest portion of the project area. In addition, activities associated with the proposed project are not expected to affect suitable aquatic habitat. Therefore, because there are no known populations of spotted frogs on the Ashley National Forest, the proposed project is expected to have **"No Impact"** on Columbia spotted frog populations or their habitat on the **Ashley** National Forest. Populations of Columbia spotted frog occur within the Uinta-Wasatch-Cache National Forest portion of the proposed project area. Design Criteria included in the Proposed Action would minimize potential effects to occupied and suitable habitat. Therefore, Northern Utah Aspen Regeneration Project **"May impact individuals or habitat, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species"** for Columbia spotted frog populations or habitat on the **Uinta-Wasatch-Cache** National Forest.

Cumulative Effects

Other projects or activities that may contribute to cumulative effects of increased sediment delivery to streams include the occurrence, use and maintenance of Forest Roads, unstable slopes resulting from recent wildfires (burn scars).

Habitat surveys and fish population surveys across the Forest indicate stable to increasing habitat conditions including low levels of surface fines and sediment within stream riffle gravel substrates. Aquatic macroinvertebrate surveys indicate good water quality and relatively low sediment within drainages sampled.

The spatial boundary of effects from the proposed project activities occurs in all perennial streams located downslope from aspen restoration areas. The effect of increased sediment delivery to the stream channels from project activities are expected to be minimal and short-term; not lasting more than one year following treatment within the drainage.

Forest practices which generate suspended sediments include all operations that disturb soil surfaces. Use and maintenance of roads located in close proximity to watercourses produce by far the highest levels of suspended sediment generation in streams (Anderson 1996).

Because design criteria identified in the proposed action would minimize sediment delivery to the stream channel and the effects are expected to be short-term, activities associated with aspen regeneration activities are **not expected to contribute to significant cumulative effects to sensitive aquatic species habitat or populations** when added to the effects of past, present and reasonably foreseeable actions.

Determination Rationale

Boreal toad and Columbia spotted frog - Ashely –
Because there are no known populations of boreal toad or Columbia spotted frog within or near the proposed project area on the Ashley National Forest, there would be no direct, indirect or cumulative effects to these species. Therefore, activities associated with the proposed aspen regeneration project are expected to have **"No Impact"** on **boreal toad, Columbia spotted frog** or their habitat on the Ashley National Forest portion of the project area.

Boreal toad and Columbia spotted frog – Uinta-Wasatch-Cache
Populations of boreal toad and Columbia spotted frog occur on the Uinta-Wasatch-Cache portion of the proposed project area. No direct effects to amphibian populations or habitat is expected. Design Criteria included in the Proposed Action would minimize potential increased sediment delivery to stream channels from soil disturbance associated with project activities. Therefore, the indirect effect of potential increased sediment in stream channels or suitable amphibian habitat **"May impact individuals or habitat, but will not likely contribute to a trend towards Federal listing or loss of viability to the population or species."**

Colorado River and Bonneville cutthroat trout
Native cutthroat trout populations occur in suitable habitat across the Two Forests. No direct effects to CRCT populations or habitat is expected. Design Criteria included in the Proposed Action would minimize potential increased sediment delivery to stream

channels from soil disturbance associated with project activities. Therefore, the indirect effect of potential increased sediment in stream channels **"May impact individuals or habitat, but will not likely contribute to a trend towards Federal listing or loss of viability to the population or species."**

Northern and Southern leatherside chubs
Leatherside populations occur in isolated locations within suitable habitat on the Uinta-Wasatch-Cache portion of the proposed project area. No direct effects to leatherside populations or habitat is expected. Design Criteria included in the Proposed Action would minimize potential increased sediment delivery to stream channels from soil disturbance associated with project activities. Therefore, the indirect effect of potential increased sediment in stream channels **"May impact individuals or habitat, but will not likely contribute to a trend towards Federal listing or loss of viability to the population or species."**

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