

**Alpine Lakes Protection Society • The Wilderness Society
American Whitewater • Aqua Permanente • Center for Environmental Law & Policy
Conservation Congress • Doug Scott Wilderness Consulting
El Sendero Backcountry Ski & Snowshoe Club • Federation of Western Outdoor Clubs
Friends of Bumping Lake • Friends of the Clearwater • Friends of Enchantments
Friends of Lake Kachess • Friends of Wild Sky • Great Old Broads for Wilderness
Icicle Creek Watershed Council • Issaquah Alps Trails Club • Kittitas Audubon Society
The Mazamas • Middle Fork Recreation Coalition (MidFORC)
North Cascades Conservation Council • North Central Washington Audubon Society
River Runners For Wilderness • Save Our Sky Blue Waters • Seattle Audubon Society
Sierra Club • Spokane Mountaineers • Spring Family Trust for Trails
Washington Wild • Wild Fish Conservancy • Wilderness Watch**

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Submitted via email to: nr.iciclesepa@co.chelan.wa.us

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RE: **Comments on Draft Programmatic Environmental Impact Statement (DPEIS)
for the Icicle Creek Water Resource Management Strategy**

Dear Directors Tebb and Kaputa:

Thank you for the opportunity to provide comments on the Draft Programmatic Environmental Impact Statement (DPEIS) for the Icicle Creek Water Resource Management Strategy. Many of the undersigned organizations provided comments in 2016 during the scoping period for the DPEIS. As you will see below, many of the concerns highlighted during the scoping period still remain despite the efforts of the Icicle Work Group (IWG) to scope and refine the range of alternatives presented in the DPEIS. **Because of the range of deficiencies in the DPEIS outlined below, the Washington State Department of Ecology (Ecology) and Chelan County should withdraw, revise, and re-release the DPEIS once the deficiencies are addressed.**

With multiple demands, and a changing climate, it will be challenging to meet instream flow targets, ensure agricultural reliability, enhance hydrologic function of the basin, and protect wilderness values. But that is the task taken on by this DPEIS. We believe there is a package

based in strong conservation measures that can accomplish those goals, but the current alternatives in the DPEIS do not.

Wilderness Values

The undersigned organizations have come together out of our concern and respect for the Alpine Lakes Wilderness and its Enchantment basin. This area is one of the most iconic and treasured natural resources in the entire National Wilderness Preservation System. These are national interest lands, owned by everyone in the nation and protected by Congress to preserve their wilderness character. As detailed in the DPEIS, thousands of hikers explore and visit this area each year and a myriad of wildlife species depend on the critical habitat it provides. Our organizations and members have great interest in the management and stewardship of these lands, and are committed to working to ensure wilderness, recreation, scenic, and other natural resource values are protected into the future.

Tribal Treaty Rights

We recognize and respect the importance of the salmon in the Wenatchee River watershed to the Treaty Rights of the Yakama Nation and Colville Confederated Tribes and both the wild stocks and the hatchery stocks developed to mitigate for the construction of the Grand Coulee Dam, which eliminated spawning habitat for huge numbers of wild salmon and other fish species.

Valid Existing Water Rights

We also recognize valid, prior existing water rights in the Wenatchee River basin for agriculture, and the importance of that local source of food and the economic benefits to Chelan County and the region.

Positive Project Elements

There are some project elements presented in the DPEIS that the undersigned organizations could support as part of a comprehensive plan that meets the requirements for fish, agriculture and wilderness preservation while simultaneously reducing water diversions and making meaningful investments in domestic and agricultural water conservation. Favorable elements in the DPEIS include: piping and pumping systems, additional domestic conservation, critical upgrades (such as circular ponds) of outdated hatchery infrastructure, fish passage and habitat improvements, and telemetric control of valves at the existing dams. However, there are fundamental flaws in the DPEIS as discussed below that must be addressed before this process moves forward.

Improper Constraints of IWG Guiding Principles

IWG does not have broad-based support. Chelan County defines IWG as “made up of a diverse set of stakeholders representing local, state and federal agencies, tribes, irrigation and agricultural interests and environmental organizations.” While at IWG’s inception it included

more nonprofit environmental organizations, today only three remain. Important environmental groups have departed IWG, including the Center for Environmental Law and Policy and Wild Fish Conservancy—groups that capture broad environmental values. The Icicle Creek Watershed Council also announced its departure last year, but the group has since rejoined IWG albeit on a provisional basis due to outstanding concerns related to the limited investment in water conservation and the degradation of the beauty and ecology of the Alpine Lakes Wilderness.

Furthermore, many groups who have been invited to the table have declined to join, including the Alpine Lakes Protection Society, The Wilderness Society, and Chelan-Douglas Land Trust, due to concerns about scope of the projects, IWG unwillingness to make adjustments to the proposal, IWG’s prohibition on public criticism, IWG refusal to treat westside owners of these public lands the same as eastside owners of these public lands, or for other reasons. While this “broad-based coalition” of IWG involves federal agencies, municipalities, tribes, and irrigation districts, it falls short in representation from the conservation and recreation community. Consequently, for this non-representative, self-selected group to create “guiding principles” that then become the purpose and need of the DPEIS is self-serving and problematic.

Deficiencies of DPEIS

At present, the range of alternatives currently presented in the DPEIS includes actions unprecedented in a federally designated wilderness area and threatens to exploit one resource (i.e., the wilderness and the water it provides) under the guise of protecting another (i.e., fish in Icicle Creek). Chelan County and Ecology can and should do better to meet instream flow targets, ensure agricultural reliability, enhance hydrologic function of the basin, and protect wilderness values. As proposed, the alternatives analyzed in the DPEIS fail to do so.

SEPA expressly requires an EIS to contain a detailed discussion of alternatives to the proposed action. RCW 43.21C.030. “The required discussion of alternatives to a proposed project is of major importance, because it provides a basis for a reasoned decision among alternatives having differing environmental impacts. Pursuant to WAC 197-11-440(5)(b), the reasonable alternatives which must be considered are those which could ‘feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation.’” *Weyerhauser v. Pierce County*, 124 Wn.2d 26, 38, 873 P.2d 498 (1994). When, as in this case, the proposal is for public projects, “the EIS must contain a sufficient discussion of offsite alternative proposals.” *Id.* at 39. Also, “there must be a reasonably detailed analysis of a reasonable number and range of alternatives.” *Id.* at 41.

The DPEIS lacks a sufficient discussion of offsite (i.e. non-wilderness) alternative proposals and does not analyze a reasonable range of alternatives, as the *Weyerhauser* decision requires. Although the DPEIS does list five alternatives plus a no-action alternative, only one of these alternatives (Alternative 5) relies primarily on an off-site proposal (Full IPID Pump Station). Furthermore, all of the alternatives repeat the same Eightmile dam “Restoration” project (construction of a dam in a wilderness area), and thus the DPEIS cannot fulfill SEPA’s requirement for analysis of off-site projects. The alternatives are mere variations on the theme of

building dams, pumps, and pipes inside a wilderness area. As discussed below, it is likely that such construction will be unlawful under the Wilderness Act, a problem the DPEIS does not even acknowledge. Because all of the alternatives involve construction in the wilderness, they do not represent “a reasonable range of alternatives,” as required by the *Weyerhaeuser* decision.

Our specific concerns and recommendations for moving forward with the DPEIS process include:

- 1. The entirety of the DPEIS rests on a flawed assumption of “paper water,” not “real water” based on the actual water usage by the primary water rights holders in the Icicle basin. Ecology must perform an extent and validity determination for the three primary water rights holders in the basin before a new DPEIS and alternatives are developed and released for public comment.**

One thing is clear in the DPEIS: the Icicle Peshastin Irrigation District (IPID) has a paper right to an extraordinary amount of water relative to other water rights holders in the basin, and Chelan County, Ecology, and the City of Leavenworth all want a portion of it to meet their needs. It is also clear that under Western water law, water rights holders must use the water or risk to lose it, simply phrased as “use it or lose it.” See RCW 90.14.170-190 (water rights relinquished if not actually used for five consecutive years). See also *Dept. of Ecology v. Theodoratus*, 135 Wn.2d 582, 592–597, 957 P.2d 1241 (1998) (water rights are based on actual, beneficial water use, not installed capacity of water systems).

The condition of IPID’s water infrastructure in the Icicle basin shows that in its near 80 years of operation, IPID has not maintained its facilities to actually store and use its full water right. This was recently demonstrated in the 2018 Eightmile dam emergency, where the risk of heightened spring flows led to emergency stabilization efforts at the delapidated dam. At Eightmile Lake, a portion of the earthen dam washed away in a 1990 flood event, and IPID did not take steps to restore the dam at that time. Since then—for the last 28 years—IPID has annually released approximately 1,400 (and up to 1,600 acre-feet) at Eightmile Lake (DPEIS, 2-63). The DPEIS states that the condition of the existing facilities at Eightmile Lake has limited the active storage volume to 1,370 acre-feet with an operational range of 23 feet (DPEIS, 3-48).

It is clear, therefore, that IPID has relinquished at least part of its paper water rights. How much of its water rights have been relinquished is precisely the question that a proper PEIS must answer. Yet the DPEIS specifically fails to account for IPID’s potential relinquishment of part of its water rights at Eightmile Lake, despite consistent questions and concerns raised by many groups since the genesis of the Icicle Work Group efforts. The DPEIS and all of its alternatives—including the No Action Alternative—assume that IPID has a right to its full paper right at all of the wilderness lakes, including 3,500 acre-feet at Eightmile Lake (as described in Alternative 4, DPEIS, p. 2-103). IPID has never utilized this much water in the entire history of its operation. Water that IPID has not used now belongs to the federal government under the

federal reserved water right doctrine.¹ If the Eightmile Lake dam is rebuilt, it should remain at its current elevation, where it has been since at least 1990, because that elevation is the largest necessary to support whatever remains of IPID’s relinquished water right. In addition, as discussed below, any dam rebuilding must be approved by the U.S. Forest Service and must comply with the National Environmental Policy Act (NEPA) and other federal and state laws. These points also apply to the U.S. Bureau of Reclamation and the U.S. Fish & Wildlife Service in connection with new storage proposed at Snow and Nada Lakes.

The most egregious misinterpretation of IPID’s water rights is represented in Alternative 4, where massive storage projects are analyzed that result in far more water storage than is needed, at the expense of wilderness values and natural hydrologic function of the basin. Alternative 4 also includes the false assumption that IPID has a right to water at Upper Klonaqua Lake, to which the IPID has no right.

Finally, Ecology has confirmed that it has not made an extent and validity determination of either IPID or the Leavenworth Fish Hatchery, as stated in a letter to The Wilderness Society on June 14, 2018:

“The IPID and the Leavenworth National Fish Hatchery both have storage water rights that originate within the Alpine Lakes Wilderness... At this time, Ecology has not made an extent and validity determination of either IPID or the Leavenworth National Fish Hatchery’s diversionary or storage water rights.”

In other words, the issue of how much water is legally available is not known and has not been addressed.

Failure to revise the DPEIS to account for IPID’s possible relinquishment of some of its water rights would constitute a violation of SEPA. SEPA requires an EIS to analyze reasonable project alternatives. “SEPA rules define ‘reasonable alternatives’ as less environmentally costly action that ‘could feasibly attain or approximate a proposal’s objectives.’” *King County v. Central Puget Sound Growth Management Bd.*, 138 Wn.2d 161, 183, 979 P.2d 374 (1999) (citing WAC 197–11–786). Here, a less environmentally costly action that still achieves the proposal’s objectives would be to limit the dam repair work to the minimum necessary to support IPID’s post-relinquishment water rights, not IPID’s paper water rights or its installed water system capacity. There is no justification to “overbuild” the dams to support a water right that no longer exists.

¹ See *U.S. v. New Mexico*, 438 U.S. 696, 698–700, 98 S.Ct. 3012, 57 L.Ed.2d 1052 (1978). The reserved federal water rights apply only if the federal land reservation pre-dates the state-law claim, and only to the extent necessary to accomplish the primary purpose of the federal reservation. In this case, the National Forest reservation occurred in 1897, according to USFS’s website, which pre-dates IPID’s 1927 water rights adjudication. The purposes of the National Forest reservation, per *U.S. v. New Mexico*, are to “improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber” (citing 16 U.S.C. § 475). Thus, the federal government in this case has reserved rights to any water from the Alpine Lakes Wilderness necessary to accomplish these purposes.

Instead, the DPEIS should analyze how much of IPID's water rights remain and should analyze the impact of building the dams to support that level of service. It is necessary to conduct this analysis because, if IPID has relinquished some of its rights, then *none* of the alternatives analyzed in detail in the DPEIS will be feasible anymore, since all rely on the assumption of un-relinquished rights.

It is alarming that Ecology, the co-convenor of IWG and co-lead agency of the Icicle DPEIS, has allowed the IWG process to consume significant time and public funding since 2013 without determining such a fundamental question, especially since groups such as the Alpine Lakes Protection Society and The Wilderness Society have been bringing this specific issue to Ecology's attention for years. Ecology must perform that determination now to inform a revised DPEIS before more public money is spent on the Icicle watershed management planning process. The public cannot comment upon the merits of Ecology's determination until after Ecology makes it and discloses it. This is a fundamental reason why the preparation of a Final PEIS would be premature; the DPEIS should be revised to address its deficiencies, and a revised DPEIS should be released for public comment, before a final EIS is prepared.

- 2. The alternatives and range of projects identified in the DPEIS do not currently comply with the Guiding Principles of the Icicle Work Group, including compliance with federal laws such as the Wilderness Act. The perfunctory checklist in the DPEIS is clearly inadequate. A revised DPEIS needs to analyze limitations on the scope and validity of IPID's water rights, which would limit several proposals; acknowledge areas of non-compliance; and identify the appropriate path forward to ensure complete compliance with federal law.**

One of the seven IWG guiding principles cited in the Icicle DPEIS is to "comply with State and Federal Law, and Wilderness Acts." Several layers of law are relevant to the projects and actions described in the DPEIS, and the interpretation of those laws will determine the viability of the projects proposed, specifically the construction of new dams at Eightmile and Snow Lakes and a tunnel between the Upper and Lower Klonaqua lakes, as well as automation and optimization efforts throughout the wilderness lake system. At present, the DPEIS fails to meaningfully consider fundamental legal issues that will determine which projects can and cannot be built, including federal wilderness law and state water law.

The DPEIS is insufficient because the lead agencies have declined to consider what they are legally permitted to do in the first place, under the "minimum necessary" standard of the Wilderness Act. The time to make that determination is during SEPA review to daylight the government's decision-making process and facilitate meaningful public comment (which are two of the main purposes of SEPA), not afterward. It is nonsensical to suggest that years of effort and significant taxpayer dollars should be expended to evaluate alternatives that are likely to be unlawful in the first instance. The agencies here appear to be procrastinating their resolution of issues that are difficult but necessary to resolve. Two glaring examples include: (1) the DPEIS erroneously assumes that IPID's easements supersede federal wilderness law; and (2) the DPEIS fails to fully analyze limitations on the scope and validity of IPID's water rights, which would limit several proposals (as discussed above).

On March 30, 2018, the U.S. Forest Service wrote to IPID that its dam repair/replacement proposal “contains elements that are beyond the scope of the rights reserved by IPID in the Special Warranty Deed.” The Forest Service requested IPID to “submit a detailed proposal” for both the emergency abatement and any long-term actions to replace the dam, and stated:

“Any modification to the dam and ground disturbance (equipment operation, road construction, etc.) of the surrounding lands may require a Special Use Authorization from the Forest. The federal action of authorizing activities on National Forest Lands is subject to a wide variety of laws including (but not limited to): Wilderness Act, National Environmental Policy Act (NEPA), National Historic Preservation Act, and Endangered Species Act (ESA).”

As the DPEIS Purpose and Need section acknowledges, the U.S. Forest Service manages 87 percent of the land in the Icicle sub-basin, 74 percent of which is located within the Alpine Lakes Wilderness. All of the lakes discussed in the DPEIS are located within the Alpine Lakes Wilderness, which adds multiple layers of federal law to consider for all actions proposed on federal land, most notably the 1964 Wilderness Act, 1976 Alpine Lakes Area Management Act, and the 1981 Alpine Lakes Wilderness Management Plan (ALWMP). Relevant direction from these laws is cited below and requires federal interpretation and development of guidance for federal actions in relation to the Icicle DPEIS, which has not been completed despite recommendations for such analyses during the 2016 scoping period for this DPEIS.

The DPEIS fails to address the Wilderness Act requirement of federal approval of facilities that are not compliant with wilderness regulations. Furthermore, Section 4(c) of the Wilderness Act relates to the concept of minimum tool requirements, applicable to activities such as access to inholdings and maintenance of water developments in wilderness:

Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. [emphasis added]

This provision sets such a high bar for the utilization of these nonconforming uses that these uses are unlikely to be available for the wilderness projects described in the DPEIS.

Specific management guidance for water resources in the Alpine Lakes Wilderness is provided in the 1981 ALWMP:

Management Objective: to preserve water bodies and stream courses in a natural state with minimal modification or human-caused contaminants. . .

Management Direction: (1) except as provided for in Section 4(d)(4) of the Wilderness Act, watershed will not be altered or managed to provide increased water quantity, quality or timing of discharge. . . . [emphasis added]

Interpretation and guidance from the U.S. Forest Service regarding the myriad elements of the Icicle DPEIS relevant to the agency's land management authority is imperative and should happen as a part of the SEPA process. IPID currently maintains agreements and easements with the U.S. Forest Service for IPID facilities at Eightmile, Colchuck, Square and Klonaquia lakes, which require consultation with the Forest Service. At present, the DPEIS takes IPID's interpretation of its rights at face value, but the DPEIS needs to take a harder look. Ultimately the range of projects described in the Icicle DPEIS on National Forest lands will require Forest Service consultation and approval. Most of the projects proposed are unprecedented in the National Wilderness System and run afoul of wilderness law and, as noted above, state water law. Many of these projects would unreasonably cause significant harm to wilderness and its purposes, including recreation (by damaging trails, campsites, changing aesthetics, etc.) and scenic and conservation values.

Because the projects are in wilderness, non-motorized access and non-motorized equipment (i.e. hand tools) and traditional skills should be required whenever feasible. Since the dams were originally built that way, the exceptions should be rare. *See Wilderness Watch, Inc. v. USFWS*, 629 F.3d 1024 (9th Cir. 2010) (requiring site-specific, comparative analysis of options to determine if an action that violates the Wilderness Act's activity limitations is indeed the "minimum necessary").

Some of the most egregious projects are included in Alternative 4 of the DPEIS, including: (1) drilling a tunnel between two lakes (Upper and Lower Klonaquia); (2) building a higher dam at Upper Snow Lake (enlarging that lake and submerging designated wilderness lands); and (3) increasing the height of the Eightmile Lake dam (making that lake bigger than it has ever been and submerging designated wilderness lands). The DPEIS utterly fails to consider the issue of compliance with federal law. *See, e.g.*, Tables 2-9 through 2-12, which state that each alternative "complies with federal law" — this claim is simply false, given the lack of analysis of IPID's water right and federal wilderness law. Furthermore, these projects were not part of the proposed action in the SEPA scoping conducted by the IWG in 2016, so the public was not asked to comment on them during scoping. It should also be noted that IPID has no right to enlarge Eightmile Lake and has no water rights or infrastructure at Upper Klonaquia Lake.

Finally, the DPEIS fails to account for the necessity of conducting project-level NEPA processes with the U.S. Forest Service as the lead agency regarding dams and tunnels in wilderness on National Forest lands. As one of many examples of this huge omission, DPEIS Table 5-2 of "Permits/Approvals and Relevant Triggers" (pages 5-8 through 5-13) repeatedly states, erroneously, that a U.S. Army Corps of Engineers National Permit and NEPA Categorical Exclusion "are the likely level of regulatory compliance for this project" – for Optimization/Automation, for Eightmile "Restoration," and for the "Enhancement" (expansion)

projects at Eightmile, Upper Klonauqua, and Snow Lakes. The necessity of U.S. Forest Service NEPA analysis is conspicuous by its absence throughout the DPEIS.

Again, these huge gaps in the DPEIS mean that preparation of a Final PEIS would be premature; the DPEIS should be revised to address its deficiencies, and a Revised Draft PEIS should be released for public comment, before a Final EIS is prepared.

The failure to consider the restrictions imposed on the proposal by the Wilderness Act constitutes a violation of SEPA. As noted above, SEPA requires reasonable alternatives to be explored in an EIS. However, each of the alternatives, except alternative 5 (which the DPEIS gave only “a very cursory review,” DPEIS at 2-35), treats the wilderness lakes as if the lakes are subject to essentially unrestricted development of new infrastructure, including the installation of higher dams, additional dams, mechanical pumps, and underground pipes. The installation of any of this new infrastructure would constitute a violation of the Wilderness Act, so the alternatives analyzed in the DPEIS are not actually “reasonable.” While it is true that not every alternative analyzed in an EIS must be legally certain, the alternatives analyzed in the EIS must nonetheless be feasible. *King County*, 138 Wn.2d at 184.

Here, there has *only* been analysis of the proposal under the legally uncertain assumption that IPID may install all of the infrastructure. There has been *no* analysis of what the proposal might look like if some of the infrastructure cannot be installed. A proper DPEIS would have at least considered the possibility that IPID might have to make do with less infrastructure at the lakes due to the restrictions of the Wilderness Act, and state water law.

3. The DPEIS presents an inadequate range of alternatives, since every alternative would significantly impact and harm wilderness values. A revised DPEIS needs to include an alternative that minimizes wilderness impacts, respects wilderness values, and is informed by the extent and validity determination of water rights as discussed above.

At present, every alternative in the DPEIS—including the No Action Alternative—includes actions that would significantly harm wilderness values. As discussed above, the DPEIS should be withdrawn, revised, and re-released with a new range of alternatives that are informed by the validity determination of the primary water rights holders in the Icicle basin as well as compliance with federal laws such as the Wilderness Act. The DPEIS currently includes the “Eightmile Restoration” project in every alternative, which would “restore usable storage to the historical and permitted high water storage elevation” (DPEIS, p. 2-15) requiring construction of a new dam approximately four feet higher than the current dam. If the dam cannot be raised due to water rights relinquishment and/or Wilderness Act constraints, then it is hardly “reasonable” to suggest a raised dam as a component of every one of the proposed alternatives. A revised DPEIS should include an alternative that includes restoration of the dam to its current height and not any higher. The failure to analyze that scenario means that the DPEIS fails to present an adequate range of alternatives. That is not allowed under NEPA and is an important consideration if the U.S. Forest Service were to adopt, in full or in part, this DPEIS.

- 4. The DPEIS improperly phases (and therefore evades) environmental review of the project components of each alternative, which avoids meaningful analysis of the cumulative impacts of each alternative. A revised DPEIS should include a meaningful and appropriate cumulative impacts analysis that provides more substantive and detailed information for each alternative, such as the number of helicopter flights required for all project components in designated wilderness of each alternative.**

“When a lead agency knows it is using phased review, it shall so state in its environmental document.” WAC 197-11-060(5)(e). Here, although the DPEIS calls itself a “programmatic” EIS, there is no discussion of what phases the project will proceed in, or what additional environmental reviews will be done during each phase. The level of detail in the DPEIS is not sufficient to conduct a site-specific review of each project (required by WAC 197-11-060(5)(c)), yet there is no indication that subsequent phases of review will address this deficiency. Thus, the DPEIS appears to be engaged in phased review without disclosing the phases as required under WAC 197-11-060(5)(e).

The DPEIS’s failure to disclose and discuss the project’s phases is not some picayune, technical violation of SEPA; it has real-world consequences. As Washington courts have noted, the failure to properly tier the phases of a project can lead to a failure to analyze cumulative impacts. *See East County Reclamation Co. v. Bjornsen*, 125 Wn App. 432, 441 105 P.3d 94 (2005). Indeed, this DPEIS suffers from exactly such a failure—for example, there is no analysis of the cumulative impact of the helicopter flights needed for each phase of the project, or the combined visual impacts of the various new pieces of infrastructure that will be installed by the end of the project.

Since this project appears to be operating under phased review, the DPEIS must disclose what the phases are and what additional review will be forthcoming. Failing to do so is both a technical violation of SEPA and leads to a failure to analyze cumulative impacts, which is another, separate violation of SEPA.

- 5. The DPEIS presents inadequate cost estimates for project proposals, skewing alternatives away from Alternative 5, which presents a pragmatic and thoughtful solution to these complex issues (e.g., the full IPID pump exchange). A revised DPEIS needs to accurately scope the potential cost of infrastructure proposals in federally designated wilderness, including consideration of the “minimum tool requirements” (as required by section 4(c) of the Wilderness Act) for federal actions in a wilderness area.**

The cost estimates and timelines for projects proposed for construction within the Alpine Lakes Wilderness are questionable because the DPEIS fails to properly account for the protections of the Wilderness Act, the land management role and authority of the U.S. Forest Service, and the requirement for NEPA analysis and compliance. Cost estimates are an important facet of assessing the reasonableness of alternatives. Analyzing cost-prohibitive alternatives does not help address the mandate to analyze a range of reasonable alternatives; nor does omitting the

additional costs of operating under the restrictive Wilderness Act limitations. While a cost-benefit analysis need not be included in an EIS, WAC 197-11-455, if the agency chooses to include cost information, it must do so in an unbiased and accurate manner.

The true costs of Alternatives 1, 2 and 4 are likely much higher than the DPEIS estimates, and closer to the cost of Alternative 5. Alternative 5 includes the “Full IPID Pump Station,” which would move IPID’s point of diversion downstream to the Wenatchee River, and greatly improve flows in Icicle Creek, especially in future decades when climate change will reduce flows in the Icicle watershed. As evidenced by the cost of the recent emergency dam repair at Eightmile Lake, which required an estimated \$100,000 to fly a piece of heavy construction equipment (an excavator) to the site—after IPID had expected to spend a mere \$2,000 to “walk” it on the ground through the Wilderness to the dam (i.e., a cost overrun of five thousand percent on that one item)—cost estimates such as \$1.6 million for “Restoration” of the Eightmile dam and \$3.9 million for the “Eightmile Dam Enhancement” seem woefully low.

- 6. The DPEIS repeatedly ignores the negative impacts on the riparian ecosystems in the Alpine Lakes Wilderness from the proposed unnaturally timed releases of water from the wilderness lakes, which will significantly alter stream hydrology. The DPEIS fails to recognize that altering the natural flow regime can degrade a stream’s physical and chemical properties, leading to loss of aquatic life and reduced aquatic biodiversity. A revised DPEIS requires proper documentation and analysis of the riparian ecosystem and the potential cumulative impacts of the suite of infrastructure projects on that ecosystem to ensure no harm to wilderness streams or lakes.**

The current DPEIS proposes a range of projects that will alter the natural hydrologic function of wilderness lakes and streams in the Icicle basin. To date, the IWG has not adequately invested in monitoring activities across the basin to fully understand and evaluate the potential impacts to the health of wilderness streams and lakes. Usually, Ecology would be the lead agency to ensure no harm when discharging water from Square, Klonauqua, Eightmile, Colchuck and Snow lakes. Ecology developed an advanced multi-metric index model of biotic integrity in 2012 for the Cascades Region which allowed Ecology to determine the health of reaches along the Wenatchee River and the health of Icicle Creek up as far as Ida Creek Campground.

That same level of detailed analysis has not been applied in the DPEIS, either by Ecology or by any other agency. Appendix A of the DPEIS does identify the Washington State Department of Fish and Wildlife as gathering base-line data for the proposed projects. However, the results from 2016 and 2017 analyze only two wilderness streams (Leland Creek and French Creek) of the five streams of concern, and that analysis was not detailed enough to determine the health of either Leland Creek or French Creek. No analysis was completed at the wilderness lakes. We are concerned that IWG has not done adequate sampling and monitoring of impacts from past releases into these wilderness streams, including cumulative impacts, as it is required under WAC 197-11-080 (requiring agencies to obtain missing information regarding significant adverse impacts, if the cost of obtaining information will not be exorbitant). The cost and delay

of obtaining the missing data would not be exorbitant, yet the absence of such data is leading IWG to make environmentally harmful decisions.

The DPEIS describes impacts on a stream resulting from the release of water from a wilderness lake (to improve the historic channel in lower Icicle Creek) as “insignificant” or they are found to be within the naturally occurring flow range of the stream. The DPEIS goes on to identify the release of water as a benefit for the affected riverine system. This simple analysis is faulty and ignores the natural flow regimes of each stream as having a characteristic pattern of flow magnitude, timing, duration, frequency, and rate of change. All of these patterns play a critical role in supporting the chemical, physical, and biological integrity of each receiving stream, which collectively form the foundation of a healthy Icicle system supporting robust fisheries.

Changes to stream chemical and physical conditions following flow alteration can lead to the reduction, elimination, or disconnection of optimal habitat for aquatic biota. The DPEIS fails to recognize that “human-induced alteration of the natural flow regime can degrade a stream’s physical and chemical properties, leading to loss of aquatic life and reduced aquatic biodiversity. Protecting aquatic life from the effects of flow alteration involves maintaining multiple components of the flow regime within their typical range of hydrologic variation.” See *Final EPA-USGS Technical Report: Protecting Aquatic Life from Effects of Hydrologic Alteration*.

Altered flows can fail to provide the cues needed for aquatic species to complete their life cycles. For example, Pale Morning Duns (Order *Ephemera Danica*) will not emerge until stream water temperatures reach 60 degrees Fahrenheit. Timing is also a factor, as they will also avoid emerging until the month of July has arrived. Alteration of the quantity and timing of river or stream flows can also significantly affect fisheries resources by introducing competing non-native fishes.

Furthermore, the ability of a stream to support aquatic life is linked to the maintenance of key flow-regime components. For example, altering the regime by increasing flows brought about by releasing relatively high water velocities from a lake during mid-summer causes stream surface water, rich in oxygen, to bypass the sub-surface environment. The typically low summer flows and corresponding low velocity allow oxygen to be pulled into the sub-surface environment, which needs oxygenated water this time of year to support invertebrates living in sub-surface environments. Invertebrates are a source of food for other aquatic life, including fish, and tend to live in a subsurface zone (hyporheic zone).

In addition to the impacts of unnaturally timed increases in discharge rates, the DPEIS also needs to examine the impacts of unnaturally reduced discharge during the period when storage is recovered, as well as lake shoreline (edge) effects.

Further complicating these challenges are the expected changes to historic hydrologic conditions resulting from climate change, which adds additional complexity to the task of estimating acceptable levels of hydrologic variation.

If the projects described in the current DPEIS move forward, water will be discharged from wilderness lakes to improve the last four miles of Icicle Creek. The health of Prospect Creek, the last mile of Leland Creek, the last five miles of French Creek, all of Eightmile Creek, the last five miles of Mountaineer Creek and the upper 20 miles of Icicle Creek are all affected by the proposed projects and must be adequately analyzed. The DPEIS ignores lake ecology and how it might affect the streams below the lakes that are discharging water from the hypolimnetic zone, particularly Eightmile, Square and Upper Snow lakes. Since Ecology has developed a model to determine stream health, Ecology should take the lead and determine the health of both lakes and streams that are part of the proposed project.

With this summary of hydrological alteration in mind, and the importance of stream and lake health, it would be prudent to avoid implementing any of the DPEIS action alternatives until a team of scientists, educated in matters associated with stream and lake health, are ready to share their findings. Such a study would help assure that the Alpine Lakes Wilderness remains a healthy wilderness, and that none of the targeted wilderness streams and lakes are harmed.

7. Conservation components in the DPEIS are insufficient. A revised DPEIS must expand these conservation actions to significantly reduce demands on Icicle Creek's water, thereby allowing its watershed to function more naturally. This will better support our region's livability and economy over the long-term.

Water conservation methods have the potential to meet City of Leavenworth and IPID consumptive demand in the Icicle watershed. A fundamental premise of this approach is that water users are entitled only to the amount of water they need, and must exercise reasonable efficiency in their water use. From a pragmatic standpoint, reducing demand and obtaining new supply through water conservation and efficiency measures and practices is good policy and will be more palatable to the public than projects that manipulate and increase diversions from the Enchantment Lakes region of the Alpine Lakes Wilderness.

From review of documents and field sites, it is clear that significant water savings can be obtained through tightening up water delivery and consumption infrastructure in the Leavenworth area, and through demand management efforts. Further, with respect to the City of Leavenworth, re-calculation of future demand is appropriate.

It appears feasible that water conservation and efficiency measures, combined with a transfer of water and service duties from IPID to the City of Leavenworth, could meet the consumptive use needs of both entities.

Here are more specific comments on water efficiency and conservation:

- (a) Incorrect Legal Assumptions. The DPEIS is incorrect and inadequate in its assumptions regarding necessary water efficiency and conservation. As is established by state statute and court decisions, reasonable efficiency in the use of water is not an option for water right holders. It is a requirement. The DPEIS offers various combinations of water efficiency and conservation projects on the assumption that achieving water efficiency is optional. However, achieving reasonable efficiency for Icicle Creek diverters, i.e., City

of Leavenworth, the Leavenworth National Fish Hatchery, and IPID must be a baseline for all alternatives, and not a bargaining chip for achieving other objectives. This is how the Cascade Orchard Irrigation Company's efficiency upgrades are treated in the DPEIS, and this treatment should extend to all other Icicle Creek water users.

(b) Applied Conservation Analysis. The DPEIS should contain analysis of Washington State water conservation laws, policies and requirements as they apply to each of the Icicle Creek water users. This is particularly appropriate given that this is a “programmatic” EIS, and should be included as part of the extent and validity analysis of water rights as discussed above. To the extent these users do not meet state requirements, projects to improve efficiencies should be established as baseline projects that will be applicable across all of the DPEIS alternatives.

(c) Applied Water Waste Analysis. To the extent water users are wasting water, they are not entitled to maintain and use their rights. An evaluation of the extent of water waste committed by Icicle Creek water diverters, particularly IPID, should include review of conveyance loss and efficiencies from the point of release of water in the Alpine Lakes Wilderness, the canal system, operational spills and any other particulars of the water delivery system. This analysis is particularly important to understand the benefits and appropriate allocation of costs associated with the IPID Full Piping and IPID Pump Exchange alternatives. A water waste analysis is particularly appropriate given that this is a “programmatic” EIS, and should be included as part of the extent and validity analysis of water rights as discussed above.

(d) IPID Irrigation Efficiencies Project (Section 2.5.2). This DPEIS section contains no discussion of actual efficiencies of the system (i.e., consumed water vs. transportation loss and waste). It is rife with vague, unquantified, and anecdotal information about actual conservation activities (i.e., “some farmers have complained”; only “small portions” of canals remain unlined). It lacks discussion about wasteful water use on converted residential properties. For more information and photographs of IPID's inefficient water use, see R.P. Osborn, Center for Environmental Law & Policy, Memo re “Water conservation potential for consumptive demand reduction and supply for City of Leavenworth and Icicle-Peshastin Irrigation Districts” (July 9, 2015), incorporated herein by reference.

(e) Domestic Conservation (Section 2.5.4) – City of Leavenworth. The DPEIS confuses wants and needs. The City of Leavenworth and Ecology need to come to agreement regarding water rights for the City of Leavenworth, including to resolve an outstanding court case. The DPEIS does not provide resolution to this issue but instead proposes to provide additional water rights (i.e., wants) to the City of Leavenworth without requiring the City to implement anything other than an inadequate water conservation plan that provides for water conservation in name only. More specifically:

- a. The City of Leavenworth's future water use demand projections are overly aggressive. The City's Water System Plan states that population will grow by

0.47% per year while its water use will grow by 2.2% per year. The projected growth in water use of 2.2% is not supported by the historic growth of water demands for the City of Leavenworth.

- b. Since 1990, water demands have varied from 850 to 1,165 acre-feet per year without a corresponding upward trend in water demand. At the same time, the City's population has increased from 1,692 to 1,990. Essentially, for 27 years water use has not grown while the City's population has increased. The City of Leavenworth's projections state that water use will begin to grow at a pace which is not supported by historical data.
 - c. If water use growth for the City of Leavenworth is estimated at 1% per year (rather than the 2.2% shown in the City's Water Plan) it will take until 2056 to exceed the temporary water right limitation of 1,465 acre-feet as imposed by the court ruling of Leavenworth vs. Ecology (Water System Plan, Figure B, p. 45).
 - d. The DPEIS states that the City of Leavenworth is considering reclaimed water to meet its demands. The City of Leavenworth's Water System Plan specifically states that it is not going to utilize reclaimed water. These statements are contradictory. Failure to plan for use of reclaimed water indicates the City's water plan is not aggressive.
 - e. The City of Leavenworth should not receive additional water supply until its water conservation plan in the City's Water System Plan aggressively promotes conservation as determined by the following factors:
 - i. The City of Leavenworth is currently allocating only \$1,000 per year for water conservation.
 - ii. The City of Leavenworth's unaccounted water (lost water) is 24%, grossly in excess of the statutory 10% mandate.
 - iii. The City of Leavenworth's water conservation plan does not include leak detection to determine where unaccounted for water is going.
 - iv. Approximately 70% of all water used is during the summer months. The City decided not to impose a conservation-based water rate due to the possible financial hardships imposed on its customers. While we understand this is politically difficult to do, the City could gradually impose a conservation-based rate over many years to minimize the shock of a sudden rate increase.
 - v. The City of Leavenworth water plan is designed to meet only the minimum Department of Health guidelines. This is very disappointing and should have been resolved prior to release of the DPEIS.
 - vi. With a more aggressive conservation program, the City of Leavenworth will not need as much additional water by 2050. The Water System Plan guideline of 1,750 acre-feet of additional domestic supply should be revised to a lower number and the associated project(s) that is required to reach this goal should not be funded.
- (f) Domestic Conservation (Section 2.5.4) – Rural Water Use. The DPEIS allocates 74 acre-feet of domestic water for the growth of 199 additional households in the watershed in Chelan County.

- a. Because Icicle Creek is over-appropriated, the basin should be closed for new growth. If new growth is to occur, new households should be required to purchase existing water rights via water right exchanges and water banks. This approach is similar to what is occurring in Kittitas and Yakima counties. Growth should pay for growth.
 - b. Growth should occur in cities and towns according to the Growth Management Act. The guidelines in the DPEIS for water usage in Chelan County should be changed to reflect this.
- (g) Leavenworth National Fish Hatchery Conservation and Water Quality Projects (Section 2.5.9). The LNFH projects provide a good example of the flawed foundation of the Icicle Strategy. Virtually all of the LNFH projects identified in the DPEIS are required to be completed by other laws and on the initiative of the federal agencies that own and operate the Hatchery in order to meet Endangered Species Act, Clean Water Act, and U.S. treaty obligations. Using LNFH upgrades as a bargaining chip to justify other elements of the DPEIS projects is inappropriate. It is evident from the DPEIS that many LNFH projects have been or will be implemented by the Hatchery, including water supply piping, effluent pumpback, fish screening, streamflow augmentation, circular tanks and fish passage.
- (h) Water Markets (Section 2.5.12). The water market proposal artificially limits itself to discussion solely of providing water to interruptible water markets in the basin. If the City of Leavenworth or other municipalities do in fact require additional water supply for future growth, water markets could serve that purpose. One obvious example would involve transfer of water from IPID to Leavenworth for residences in the Ski Hill area. There appears to be substantial waste of water in that neighborhood (see RP Osborn, Conservation Memorandum, cited above, including photos), which largely converted from orchards at some time in the past. Bringing those properties into reasonably efficient water duties for residential properties could free up water to serve properties elsewhere in the City of Leavenworth water system. This is an example of how a water market might operate to serve new demand. The DPEIS should be amended to evaluate a larger range of options for this tool.

8. Miscellaneous comments.

- (a) Inadequate Instream Flow Goals. The proposed non-drought year 100 cfs flow target does not meet basic needs of Icicle Creek wild fisheries. Further, the 60 cfs drought goal is inconsistent with scientific consensus that fish must have adequate cold water in drought periods to avoid significant impacts caused by high water temperatures. The appropriate flow goal is 250 cfs, which represents not an “every year” flow, but the high water year flow that is necessary to ensure survival and healthy populations of wild fish. For more information, see “Analysis of Icicle Creek Instream Flow Benefits of Three ‘Base Projects’ During Low Flow Months” prepared by Mark Hersh, Wild Fish Conservancy, and Dick Reiman, Icicle Creek Project (16 pp., July 2013), transmitted to

the Icicle Work Group, and letter from Wild Fish Conservancy to Tom Tebb (14 pp., 12/19/13). These documents are incorporated herein by reference.

- (b) IPID Full Piping & Pump Exchange Project. As is evident in Figures 2-6, 2-7 and 2-8, the Alternative 1, 2, 3 and 4 “Base Package” projects are unable to meet even the inadequate 100/60 cfs flow goals. Only the IPID full piping and pump exchange scenario (in Alternative 5) is able to come close to achieving the pre-development natural flows in Icicle Creek that are necessary to support healthy fisheries.
- (c) Junior Water Users. The DPEIS sets forth as a “guiding principle” agricultural reliability, with a specific goal of providing full water rights to the 56 interruptible water rights holders in the basin. While this principle is compassionate, it fails to recognize that these water users took their rights with an understanding that they were interruptible, and indeed the prior appropriation doctrine operates on the principle that junior users will be curtailed during low water years. The predicament of these users was deliberately created by Ecology when it chose to issue more water rights than there is sufficient water to fulfill each year, and by the water users when they chose to accept such rights. Because Ecology has not closed the basin, what is to prevent this cycle from repeating itself? As specifically contemplated in the DPEIS alternatives, Ecology will continue to issue junior water rights, which are then curtailed, leading to future water projects to make these juniors “whole.” The DPEIS fails to discuss the implications of this open-ended water management.
- (d) Easement Map. The description of IPID’s easements in the Alpine Lakes Wilderness (DPEIS p. 2-44) should include maps, including the map that shows that IPID does not hold an easement for the entirety of Eightmile Lake.
- (e) Section 2.5.7 Habitat Protection. The discussion of land acquisitions through the Upper Wenatchee Community Land Plan appears to target lands outside the Icicle Creek basin. The DPEIS does not provide a basis for understanding how these land acquisitions benefit Icicle Creek. It appears the Icicle Work Group has evaded an issue by simply adopting the goals and priorities of another group. This approach does not support expansion of the Wenatchee basin instream flow reserve for the Icicle sub-basin.
- (f) Section 2.5.7 Instream Flow Amendment. As noted in discussion of City of Leavenworth water conservation above, the City has significantly overestimated future demand, and is underperforming on state mandated water conservation requirements. Expansion of the instream flow rule domestic reserve based on City demand and planning is not justified. The DPEIS fails to discuss this.
- (a) Section 2.5.9 LNFH Groundwater Augmentation. The DPEIS fails to identify or analyze the problem of utilizing groundwater collectors to pump groundwater in direct hydraulic continuity with Icicle Creek. This proposal appears to propose improving reliability of LNFH groundwater supply at the expense of depleting flows in Icicle Creek.

(b) The Cost of Water. The DPEIS provides a misleading and inappropriate comparison for developing water. Chapter 2 states five times that the cost of water in the Columbia Basin is \$500/acre-foot for projects developed by the Office of the Columbia River (OCR). OCR projects such as the Lake Roosevelt Drawdown or Sullivan Lake transfer represent heavily subsidized projects that were developed as “low hanging fruit,” and are not appropriate for comparison in the DPEIS. One problem is that this number does not appear to include infrastructure costs, thus creating an apples-to-oranges comparison. In contrast, the costs associated with providing water to, for example, the Odessa Subarea have been astronomical, but covered by programs such as the ARRA and other grants. We suspect these numbers are not included in the \$500/acre-foot “baseline.” The DPEIS at page 2-57 does, however, identify the previously completed IPID Canal to Pipeline Conversion as costing \$2 million to obtain 360 acre-feet of water, i.e., a \$5,555/acre-foot cost. The DPEIS is deficient in failing to provide appropriate and realistic cost comparisons for Columbia Basin water development.

Conclusion

Thank you for the opportunity to provide comments on the Icicle DPEIS. Our organizations support collaborative efforts to develop innovative and sound approaches to water and natural resource management for Icicle Creek and the greater Wenatchee River basin, and we appreciate the commitment of organizations, tribes, agencies, and individuals to this important endeavor. As we face a certain future of increased demands on limited water resources, such collaborative efforts will be required to balance the range of competing needs. Broad-based community involvement and support as well as transparency and trust are critical ingredients for success.

For all reasons described above, we request the Icicle DPEIS be withdrawn, revised, and re-released as a Revised Draft PEIS for public comment once the deficiencies detailed here are addressed.

Sincerely,

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Alpine Lakes Protection Society

Kitty Craig, Washington State Deputy Director
The Wilderness Society

Trish Rolfe, Executive Director
Center for Environmental Law & Policy

George Nickas, Executive Director
Wilderness Watch

Gary Macfarlane, Ecosystem Defense Director
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Sharon Lunz, President
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Wild Fish Conservancy

Art Campbell, President
North Central Washington Audubon Society

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El Sendero Backcountry Ski & Snowshoe Club

John Spring, President
Spring Family Trust for Trails

Mark Boyar, President
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Mike Town, President
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U.S. Senator Maria Cantwell
U.S. Representative Dave Reichert
Okanogan-Wenatchee National Forest Supervisor Mike Williams
Wenatchee River District Ranger Jeff Rivera