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In recent decades, watershed managers have increasingly turned to collaborative models of governance for water resource planning in the Western United States. By involving a wide array of stakeholders in decision-making, these place-based partnerships promise many benefits for basin management: better understanding of local needs, increased public support, and reduced conflict. Yet, many basins involve powerful, non-local stakeholders, who may not participate in place-based partnerships but can still hinder the collaborative process and derail implementation. One such case is the Icicle Creek Subbasin of Washington State, where a local partnership has been involved in comprehensive watershed planning since 2012. In order to mitigate the impact of droughts and boost instream flow, the Icicle Work Group's plans have included infrastructural upgrades to storage dams in a federal wilderness area. These projects have drawn intense criticism and threats of litigation from the conservation and recreational organization, who see their wilderness interests threatened by the projects. This research examines this Icicle Creek Subbasin planning effort and asks the following research question: how effectively did the Icicle Work Group incorporate input from outside stakeholders into their collaborative planning processes? This study uses the well-documented environmental review process to identify the key concerns of external stakeholders and examine how effectively the collaborative partnership was able to

address those concerns. Comment letters from external stakeholder organizations were analyzed using reflexive thematic analysis and the agency responses were identified for each theme. Ultimately, the analysis found that the key concerns of outside stakeholders remained throughout the process, as the agencies and work group were unwilling to make major modifications to their plan. This suggests a number of conclusions: 1) place-based partnerships favor maintaining internal consensus over avoiding conflicts with outside groups; 2) the environmental review process is a limited platform for outside stakeholders to shape planning efforts; 3) state agencies involved in the collaborative planning should consider should delegating the environmental review process to an outside agency to avoid perceptions of a conflict of interest; and 4) watersheds with federal wilderness may not be well-suited for local collaboration.

Planning for Failure? Addressing Outside Stakeholders in Collaborative Basin Planning

by

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Chapter 1: Introduction

Watershed management is a notoriously difficult political and technical endeavor. Rivers form complex socio-ecological systems, crossing political boundaries, connecting distant ecosystems, and supporting competing uses (Imperial 2005; Loucks-Beck 2017). Over the past century, water resources in the Western United States have been increasingly strained by environmental degradation, human demand, and frequent drought (Fuller & Harhay 2010). The result has been frequent litigation and political conflict between farmers, environmentalists, Native American tribes, and government agencies (Kenney 2005).

In response to these wicked problems, watershed managers have looked for solutions beyond the technocratic models of past (Sabatier, Weible & Ficker 2005; Weber et al. 2017). Top-down management has been replaced by a governance paradigm based on community-level, deliberative processes (Singleton 2002; Leech et al. 2002; Sabatier, Weible & Ficker 2005). Supported by state and federal agencies, collaborative partnerships now invite a wide range of stakeholders and competing values into the decision-making process (Ansell & Gash 2007; Weber 2000; Lurie & Hibbard 2008; Margerum & Robinson 2015). In theory, this new form of governance provides a forum to manage water more efficiently, discover mutually beneficial solutions, and mediate potential conflicts without costly lawsuits (Weber 2000; Weber 2003; Imperial 2005; Sabatier, Weible & Ficker 2005). This promise has led to the rapid spread of collaborative models; Kenney et al. (2000) identified at least 346 place-based partnerships in the Western U.S. alone. Even in historically contentious basins, such as the Yakima Basin (Washington) and Klamath Basin (Oregon & California), state and federal agencies have looked to collaborative models for an alternative to decades of litigation and community conflict.

Yet, as with any governance model, new conflicts and criticisms have arisen. Many basins involve powerful stakeholders from outside the basin, from federal agencies, such as the Bureau of Reclamation, to nationally influential environmental groups, such as the Sierra Club. External opposition from such groups can hamstring efforts to move decision-making to the local level (Kenney 2000; McMurtrey 2018). Managing these outside influences can be just as important to the outcome of collaboration as finding consensus within the group. In the Klamath Basin, for example, a collaborative plan found broad community support but its implementation was blocked by lack of federal support (Mapes 2015; McCool 2018). In other instances, both environmental and pro-industry interest groups have used derailment as tactic to obstruct collaborative plans they opposed (Hibbard & Madsen 2003; Walker & Hurley 2010).

The literature on collaborative partnerships in the Western United States reveals a couple key issues: the limits of collaborative models for dealing with "no compromise", single interest stakeholders and the difficulty of incorporating non-local interests in place-based processes. National environmental groups, such as the Sierra Club and Wilderness Society, have criticized natural resource collaboratives for favoring economic interests, co-opting public agencies, disenfranchising urban stakeholders, suppressing legitimate dissent, and creating poor resource outcomes (McKloskey 1999; McKloskey 2000; Kenney 2000; Hibbard & Madsen 2003). These powerful organizations may not have the incentive or ability to participate in collaborative partnerships, but they can still wield strong influence over the planning process. Their opposition can weaken political support for the planning process, limit potential solutions, and hamstring the implementation of key projects (Hibbard & Madsen 2003; Walker & Hurley 2010). To address this threat, collaborative groups must consider how to balance the needs of their place-based

members with the demands of powerful external stakeholders when their interests, values, and goals for water management in the basin may not align (McMurtrey 2018).

The Icicle Creek Subbasin of Washington State provides an ideal case for studying this dilemma. Since 2012, a place-based partnership called the Icicle Work Group has been engaged in a collaborative watershed planning. The issues in the subbasin are representative of many watersheds around the Western U.S.; endangered salmonids, tribal fish harvests, irrigated agriculture, and growing urban populations all rely on unpredictable and overutilized late summer flows. Outdated infrastructure has limited the ability of water managers to mitigate shortages and insure against drought. Models project that the limited water supply will be further stressed by climate change, as alpine snowpack and the timing of snowmelt become increasingly variable (Marlier et al. 2017). Meanwhile, degraded habitat conditions and poor water quality have further impaired the recovery of riparian ecosystems and endangered fish populations (Dept. of Ecology & Chelan County 2019). To address this myriad of issues and mitigate conflict, the Washington State Department of Ecology and Chelan County Natural Resource Department convened a workgroup of interested stakeholders in 2012 to develop a comprehensive watershed plan (known as the Icicle Strategy) and establish a common vision for the basin.

Yet, since its inception, the Icicle Work Group planning effort has been mired in resistance and controversy. The Icicle Strategy contains controversial infrastructure projects on seven dammed lakes in the Alpine Lakes Wilderness Area. Built nearly a century ago by local irrigation districts, some of these dams have lost a significant amount of capacity and rely on imprecise manual controls. Plans to repair and automate the dams are central to the Icicle Strategy's goals to increase instream flow, protect agricultural water supply against drought, and implement adaptive

management (Dept. of Ecology & Chelan County 2019). Yet, their location in a beloved wilderness area has brought the attention of powerful environmental and recreationist groups who fear that the new projects will impair the wilderness qualities of this iconic area and weaken public land protections in general (Bush 2019). In sum, the Icicle Work Group's objectives for drought mitigation and instream flow are in opposition to goals of wilderness protection by external stakeholders.

While there is abundant literature on the internal dynamics of place-based collaboration (see Chapter 2), there is less research on how place-based partnerships engage with stakeholders outside the group. The Icicle Creek case study provides fertile ground for investigating how collaborative groups can incorporate outside input into the planning process and address the concerns of "no-compromise" stakeholders. With hydrologic patterns changing throughout the Western U.S., the Icicle Creek Subbasin holds lessons for snow-dependent basins trying to balance the protection of wilderness areas with the preservation of late summer water resources.

This paper investigates the Icicle Creek case study by examining two key questions:

1) How do place-based collaborative partnerships incorporate input from outside stakeholders into their planning processes?
2) Do partnerships address outside concerns in ways that mitigate the chance of conflict with outside stakeholders?

To explore these questions, this study examines the Icicle Strategy's well-documented environmental review process. As required by Washington's State Environmental Protection Act (SEPA), the Icicle Strategy underwent a thorough public comment process as part of its environmental impact assessment. Through textual analysis of these comment letters, this study

will identify the key concerns from outside stakeholders and explore how the co-lead agencies and Icicle Work Group incorporated those concerns into the planning process. This investigation will explore how one place-based partnership formally dealt with the concerns of outside stakeholders, evaluate the effectiveness of their process, and consider how such collaborative groups can perhaps better address this type of challenge in the future.

The following chapter (Chapter 2) reviews the literature on place-based collaborative governance. It begins with an overview of the theoretical underpinnings of collaborative governance, defining important terms and summarizing the common characteristics of place-based partnerships. Next, the chapter examines the proposed benefits of collaborative approaches, including both normative and efficiency-based arguments for its advantage over traditional governance models. Chapter 2 concludes by reviewing the common critiques of place-based collaboration and its ability to deliver these benefits, including the difficulty of incorporating single-interest stakeholders and balancing benefits at different scales.

Following the literature review, Chapter 3 introduces the case study: the Icicle Work Group (IWG) and the Icicle Strategy collaborative plan. After outlining the pre-existing conditions in the Icicle Creek Subbasin and the need for watershed planning, the chapter describes the organization and guiding principles of the IWG. Finally, Chapter 3 traces the development of the Icicle Strategy from the first meeting in 2012 through the environmental review process to its final adoption in January 2019. This description of the environmental review process provides important background information for understanding the methods and results.

Chapter 4 describes the study's research methods. To analyze the dataset from the Programmatic Environmental Impact Statement comment letters, the researcher coded the texts

using reflexive thematic analysis. This approach allowed the study to identify the external organizations' main concerns about the Icicle Strategy and then explore how the co-lead agencies responded during the planning process.

After outlining the methods, Chapter 5 describes the results of this analysis, relating the main themes found in the comment letters. The results track the key concerns from the scoping comments and DPEIS comment letters, then summarize the co-lead agencies' responses to these concerns. Finally, Chapter 6 discusses the what these results reveal about place-based collaboration in the Western U.S., outlines the main lessons to be taken from the Icicle Strategy process, and concludes with suggestions for future research.

Chapter 2. Literature Review

Place-Based Collaborative Governance

So, what exactly does the term '*place-based collaborative governance'* mean? The literature on collaborative governance and stakeholder participation contains a bewildering array of terms and definitions. A number of terms describe similar models of community decision-making over natural resources: stakeholder partnerships (Leech et al. 2002), community-based collaboration (McKinney & Field 2008), community-based natural resource management (Lurie & Hibbard 2008), and grass-roots ecosystem management (Weber 2000), to name just a few. Since it is beyond the scope of this chapter to parse the advantages of each, this study adopts the term '*place-based collaborative governance*'. This label most fully captures the two aspects central to this governance paradigm:

1. Collaborative decision-making
2. Local-scale partnerships

Although collaborative governance exists in many policy realms, this literature review focuses on studies involving the management of public natural resources, particularly watersheds and water resources.

Place-based collaborative governance describes a particular type of political process. At the center of this model is shared responsibility between the local community and the regulating agencies. Singleton (2002) broadly defines collaborative environmental policymaking as "a process in which 'stakeholders' share with regulators the tasks of designing and implementing remedies to environmental problems" (p. 54). Other scholars focus their definitions on the decision-making process and interaction *between* stakeholders. Weber (2003) characterizes place-

based collaboration as a process "in which coalitions of the unalike come together in a deliberative format to resolve policy problems affecting the environment, economy, and community (or communities) of a particular place" (p. 3). Thus, at a basic level, place-based collaborative governance describes an arrangement in which local communities exert some degree of control over resource management and make decisions through a participatory process featuring a wide variety of interests.

Fundamental to the concept of collaboration is the participation of 'stakeholders'. Leach et al. (2002) offer a succinct definition of stakeholder: "any individual or organization interested in a particular policy issue" (p. 648). In watershed planning, a stakeholder can be thought of as any party who is either affected by or can affect a decision (Reed 2008). In a collaborative partnership, stakeholders not only provide information to agencies but take an active role in developing objectives, gathering information, discussing actions, and making decisions. Some scholars stipulate that collaboration over natural resources must include both private and public actors (Singleton 2002; Ansell & Gash 2007). Although a wide range of stakeholders may be considered partners in the decision-making process, this does not necessarily mean they exert equal influence or control. As illustrated later in this chapter, who is considered a stakeholder and how much power each holds can become a major source of contention.

The *place-based* element of place-based collaborative governance refers to a devolution of policy making to the local level. Water resource managers often organize governance along basin boundaries to best capture the hydrologic and ecological interconnections (Loucks & van Beek 2017). Watershed management also has political advantages; in many basins, no single stakeholder has the ability to achieve its policy goals by acting individually. Interdependence with other

stakeholders makes cooperation necessary achieve a desire outcome (Imperial 2005; Ansell & Gash 2007; Emerson et al. 2012). Moving towards place-based collaboration relocates decision-making from agency offices to local meetinghouses, boosting community involvement and shifting priorities. This move to place-based collaboratives involves a devolution of authority from federal or state agencies to local governments and civil society (Lurie & Hibbard 2008). As decision-making power moves to the local basin level, management priorities often privilege the interests of local resource users, sometimes at the expense of out-of-basin environmental interests (Kenney 2000; Hibbard & Madsen 2003). This issue of scale and representation will resurface in the critiques of 'place-based' governance covered later in this chapter.

So, how does *place-based collaborative governance* work in practice? Collaborative partnerships take a wide variety of shapes and sizes, but there are several common elements and characteristics:

Membership and Formation of Partnerships

Collaborative partnerships are multi-interest, featuring a wide array of both public and private stakeholders (Leach et al. 2002; Lurie & Hibbard 2008). In principle, collaborative groups strive for both inclusivity and fair representation in membership. Inclusivity requires that collaborative groups place few formal restrictions on participation and leave membership reasonably open to the public (Leach 2006). Representativeness ensures that all affected stakeholders have adequate representation to effectively advocate their interests, based on the principle that "having a moral or economic stake in the outcome of a public decision-making process entitles each faction to a seat at the table" (Leach 2006, p. 101). Maintaining an appropriate

balance between inclusivity and representativeness is critical to the perception of legitimacy (Leach 2006). Membership requires serious commitment; as Bentrup (2001) notes, active and continuous participation throughout the process is essential for collaborative planning to successfully achieve objectives. For this level of commitment, there should be clear communication about the partnership's scope and authority. Without the ability to influence outcomes and implement plans, stakeholders have little incentive to participate in lengthy collaborative processes (Reed 2008).

Principles and Dynamics of Collaborative Governance

Collaborative partnerships generally rely on the principles of open communication and equal participation. Since the process relies on face-to-face dialogue between participants to explore new solutions, deliberation lies at the heart of collaborative governance (Bentrup 2001; Ansell & Gash 2007). One major element of open dialogue is trust-building, as former adversaries learn more about each other's interests to build a working relationship (Ansell & Gash 2007; Reed 2008). In a broad review of studies on collaborative partnerships, Ansell & Gash (2007) found that achieving small victories can also help build group identity and generate momentum for larger projects (McMurtrey 2018). Along with strengthening group dynamics, open deliberation also facilitates mutual gains (Ansell & Gash 2007; Lurie & Hibbard 2008). Originating in the field of alternate dispute resolution, a mutual gains approach assumes that parties in conflict often hold undiscovered common interests and that an exploration of these interests can generate 'win-win' solutions for all (Singleton 2002; Ansell & Gash 2007).

Along with open dialogue, collaboration depends on clear norms that respect the interests of all participants. Ground rules can be essential, especially in high conflict situations, to maintain stakeholder involvement. Lasting partnerships often establish clear guiding principles, dispute resolution mechanisms, and decision-making procedures (Bentrup 2001; Ansell & Gash 2007). Collaborative partnerships commonly make decisions through consensus (Weber 2000; Ansell & Gash 2007). By acting through consensus, partnerships reinforce group unity and ensure that each member has meaningful influence and ownership in the planning process (Bentrup 2001; Lurie & Hibbard 2008).

Common Stages of Collaborative Watershed Planning

Collaborative partnerships often take years to build relationships, explore options, and reach consensus on a single course of action. Bentrup's (2001) revision of the Selin & Chavez (1995) model of collaborative planning identifies some of the common steps and stages followed by place-based partnerships (see Figure 2.1).

Before planning begins in a basin, there are *Antecedents* that drive collaboration and influence how the partnership will be organized. Growing crises, long-lasting tensions, lack of data, or impending regulatory action all build pressure within a basin, driving stakeholders to collaborate (Bentrup 2001). Strong leadership often plays a major role in establishing a collaborative partnership (Ansell & Gash 2007). Wollodeck and Jaffee (2000) found that having active, enthusiastic 'local champions' to drum up community support can be critical to the early success of partnerships. Once there is support to start collaborative planning in a basin, a legal mandate is essential to define the partnership's scope and its ability to implement decisions.

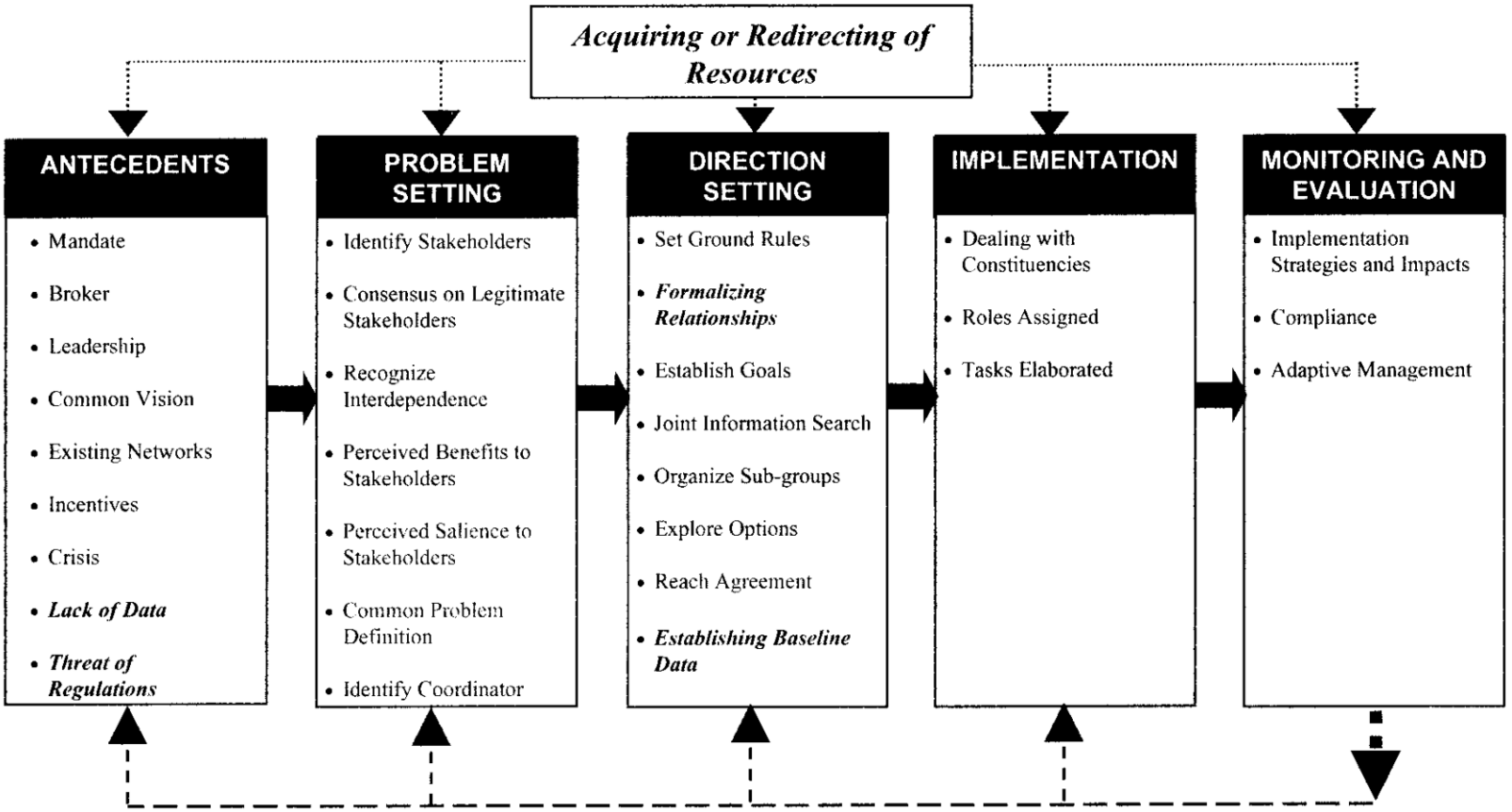

Figure 2.1: Selin & Chavez (1995) model for environmental planning as revised by Bentrup (2001)

Once the collaborative partnership has been convened, the next stage is *Problem Setting*. During problem setting, membership is formalized: "stakeholders are identified and consensus is supposed to be obtained on who has a legitimate stake in the issues" (Bentrup 2001, pg. 740). Stakeholder identification typically requires an iterative process to capture the full range of interests in watershed planning (Reed 2008). However, integrating new stakeholders in the process becomes increasingly difficult farther along (Reed 2008). Once convened, stakeholders begin with face-to-face dialog to discuss the issues at stake and agree on the collaborative objectives. Reviewing the literature, Ansell & Gash (2007) found that common problem definition and common vision are required to drive successful collaboration. This phase may require relationship and trust building. Oftentimes, collaboration in basins with a history of environmental conflict requires skillful leadership and facilitation to keep all parties on board and convince each stakeholder that participation will benefit their interests (Ansell & Gash 2007).

Once a collaborative partnership agrees to a common set of problems, they can move to *Direction Setting*, in which they choose a plan of action. With clear ground rules in place, stakeholders deliberate to develop a common vision for the basin, including the group objectives. Group objectives are then operationalized into criteria and indicators, with which potential actions can be evaluated (Bentrup 2001). During direction setting, stakeholders typically engage in joint fact-finding in order to establish a single, trustworthy source of baseline data (Bentrup 2001; Ansell & Gash 2007; Lurie & Hibbard 2008). Oftentimes the interdisciplinary nature of collaborative planning requires subcommittees of experts to evaluate technical aspects of a plan on behalf of the broader group (Bentrup 2001). If the group can finally reach a consensus decision after deliberation, it can adopt and implement the chosen plan.

Decision-making does not mean the end of most collaborative partnerships, however. *Implementation* often requires stakeholders to complete specific actions, enact certain policies, or initiate project-level planning. Continuing collaborative engagement ensures commitment and accountability. Controversial plans may also require community outreach to avoid political opposition. Finally, collaborative partnerships require continuous *Monitoring & Evaluation* to gauge whether the plan is achieving its objectives, meeting community needs, or causing unforeseen issues. Since the situation in any basin is constantly evolving, planning remains an iterative process, often requiring adaptive management (Bentrup 2001; Loucks & van Beek 2017).

Proposed Benefits of Collaborative Governance

Researchers and water managers have argued numerous rationales for the move toward place-based collaborative partnerships. Traditional approaches to watershed planning have typically accommodated little public participation. Limits on public information and involvement during plan development has often led to politically unpopular plans and litigation from upset stakeholders (Bentrop 2001; Sabatier, Weible & Ficker 2005). Instead, the literature suggests that collaboration-based planning can produce more holistic, equitable, and publicly-supported decisions (Weber 2000; Weber 2003; Bentrop 2001; Sabatier, Focht, Lubell, Trachtenberg, Vedlitz & Matlock 2005).

Proponents of place-based collaborative governance propose two main types of benefits: normative and efficiency-based (Newig 2007). Normative benefits refer to the belief that collaborative approaches can enhance democratic ideals and create more equitable process, while efficiency-based benefits focus on collaboration's advantages in generating better outcomes for

natural resources and communities. While there is often overlap between these two types of benefits, they are presented separately below.

Normative Benefits

On the normative side, collaborative governance is seen as more legitimate, transparent, and democratic platform for decision-making than traditional management approaches. Public participation has become an increasingly essential aspect of natural resource decision-making (Newig 2007; Red 2008). Collaborative partnerships can provide open forums that are inclusive of a wide variety of community interests (McKinney & Field 2008). Broad inclusivity and consensus-based decision-making can empower previously marginalized groups, creating more equity in resource management and benefit allocation (Reed 2008). By enabling broader participation, collaborative governance can increase public trust and establish greater legitimacy than agency-based decision-making (Newig 2007; Reed 2008). Agency mistrust is a major factor in rural Western communities, where environmental battles have built a deep animosity towards the federal government (Krannich & Smith 1998; Wondolleck & Yaffee 2000).

Along with broader inclusion, proponents claim that place-based collaborative planning moves natural resource management to a more appropriate administrative level (Weber 2000). This push for local decision-making is guided by the principle that natural resources should be managed by the communities which depend upon them. Local communities have the best understanding of their own local socio-economic conditions and the greatest incentive to manage the resources appropriately (Weber 2005; Sabatier, Weible & Flicker 2005). Lurie & Hibbard (2008) observe that the philosophy behind community-based natural resource management in the

U.S. is rooted in Jeffersonian civic ideals, a vision in which "citizens voluntarily participat[e] in democratic processes to create and maintain robust communities" (Lurie & Hibbard 2008, p. 430). This political project sees the devolution to local autonomy as a revitalization of citizen-led democracy.

Along with empowering stakeholders and increasing autonomy, collaborative planning can generate broader community benefits beyond resource management. Developing shared policies and social norms can build a group identity and common vision for community goals (Imperial 2005). Collaborating for mutual benefits can reduce polarization between former adversaries and reduce the chance of future conflict (Singleton 2002). An example of this is the Applegate Partnership and Watershed Council in Southern Oregon; formed by local environmentalists and loggers in response to increasing tension over the spotted owl controversy, the partnership has enhanced cooperation on restoration projects and reduced partisanship (Yaffee & Wondolleck 2003). In a study of six watershed partnerships, Imperial (2005) found that participants rated the increase in trust and working relationships among the greatest benefits. These benefits can go beyond watershed towards transforming community relations and enhancing cooperation on other issues (Singleton 2002; McKinney & Field 2008). The Applegate Partnership, for example, changed negative perception about federal agencies and sparked interest in greater civic participation (Yaffee & Wondolleck 2003; Rogers & Weber 2010).

Efficiency-Based Benefits

The literature also proposes numerous practical advantages of place-based collaborative governance over top-down resource management. Watersheds are inherently complex socio-

ecological systems; effective management requires a deep knowledge of both scientific systems and competing human interests (Imperial 2005). Collaborative partnerships provide enhanced institutional capacity to handle complex water management issues (Margerum & Robinson 2015; Weber et al. 2017). Incorporating local input and knowledge can lead to better decisions and identify potential problems before they occur (Rogers & Weber 2010). By involving diverse opinions, collaborative models consider a more representative array of community needs and can facilitate mutually beneficial solutions (Singleton 2002; Margerum & Robinson 2015). Studies also suggest that watershed-level planning allows for more holistic, integrated water resource management than traditional administrative approaches (Singleton 2002; Roger & Weber 2005). An example of such outcomes comes from the Dungeness River Watershed in Washington State, where collaboration has been successful in changing land use practices, implementing restoration projects, and voluntarily limiting late summer withdrawals to aid in endangered species recovery (Singleton 2002).

Proponents claim that collaborative partnerships can also improve efficiency through greater flexibility and community buy-in (Singleton 2002). Cooperation facilitates the sharing of resources and enables joint fact-finding (Imperial 2005). Private stakeholders can voluntarily coordinate in ways not possible through top-down regulation. For example, Rogers & Weber (2010) highlight the collaborative success of the Blackfoot Challenge, a collaborative watershed group in Montana. Unable to meet its instream flow goals through state water law, the partnership convinced irrigators to voluntarily convert to more efficient equipment by arranging cost-sharing with federal agencies and environmental groups. Since community members play an active role in the planning process, stakeholders share a common understanding of the planning goals and

projects, making implementation much smoother (Bentrup 2001; Margerum & Robinson 2015). If any disagreements do arise throughout the collaborative process, community partnerships typically provide a cooperative forum and protocol for mediation outside of court, avoiding costly legal fees and years of inaction (Margerum & Robinson 2015).

Critiques of place-based collaborative governance: Too good to be true?

Despite the growing popularity of place-based collaborative governance, a number of critiques have emerged. Skeptics have questioned not only whether place-based collaborative governance can deliver on its lofty democratic promises but also whether it produces better decision-making processes and outcomes (McKlosky 1999; McKloskey 2000; Kenney 2000; Echeverria 2001; Hibbard & Madsen 2003).

From an efficiency standpoint, there is mixed evidence that collaborative processes save time and money compared to traditional resource management (Singleton 2002). The extra time needed for deliberation and consensus-finding can delay urgent actions (Reed 2008). Ultimately, local circumstances, inadequate resources, poor design, and lack of leadership can hamper its effectiveness in many watersheds. Imperial (2005) sums up a common refrain in the literature surrounding place-based partnerships: "When used correctly, collaboration is an effective governance strategy. When used inappropriately, it can create more problems than it solves" (p. 312). When implemented in unsuitable political situations, the results are often frustration, deeper partisanship, and a distrust of future collaborative efforts (Walker & Hurley 2010).

Critics also challenge the democratic rationales for collaborative governance, contesting the notion that place-based partnerships are inherently more egalitarian than traditional governance

models (McCloskey 2000; Kenney 2000). A common criticism of collaborative groups is that they can enable powerful, entrenched interests to control local process (McCloskey 2000; Singleton 2000; Lane & McDonald 2005). Even in formally 'equal' arrangements, existing power relations still influence (and often determine) the final outcome of planning (Reed 2008; Walker & Hurley 2004). Historically disenfranchised stakeholders often find themselves at a stark disadvantage in terms of information, resources, capacity, and political influence (Lane & McDonald 2005; Leach 2006). Not every important stakeholder may be able to participate since collaborative planning often requires a large commitment of time and travel or a high level of expertise (Reed 2008). Over time, involvement can drop off as stakeholders suffer participation fatigue or become disillusioned with the process (Reed 2008).

Some environmental activists argue that the pressure to conform in collaborative groups suppresses an open, honest discussion of plans (McClosky 1999). Other scholars dispute the appropriateness of consensus decision-making for managing natural resources (Echeverria 2001). The pressure to appease all parties can lead to undesirable compromises and "lowest common denominator solutions," in which very little is agreed upon (Kenney 2000). With effective veto power, stakeholders with non-negotiable positions can effectively hamstring deliberation (Reed 2008). This ability of minority interests to override majority decisions challenges the notions of collaboration as a more 'representative' form of governance (Kenney 2000). Ultimately, the "lowest common denominator" effect may skew management towards the status quo, stalling controversial but needed actions in many basins (Kenney 2000; Echeverria 2001).

Some critics see the stigmatization of 'conflict' itself as a major flaw in the theory of collaborative governance (McCloskey 2000; Kenney 2000). With its origins in the field of

alternative dispute resolution (ADR), collaborative governance is based in the principle that conflict avoidance itself is a primary goal of planning. As McCloskey (2000) critiques, "consensus rule is based on the supposition that civic conflict is the greatest problem of all, which simply is not the case" (p. 433). The narrowminded focus on conflict avoidance can take precedence over responsible resource management and the equitable distribution of benefits (McCloskey 2000). Research has found that local collaborative partnerships can shift the goals of collaborative partnerships from improved environmental outcomes to the reduction of conflict, sidelining valid ecological concerns (Kenney 2000; Singleton 2002; McKinney & Field 2008). Deliberative ADR frameworks also rely on the assumption that the exploration of interests can find mutual gain solutions. Yet many natural resource decisions are inherently zero-sum games; collaborative groups are not the appropriate forums to decide such disputes (Imperial 2005; McCool 2018).

Finally, some critics challenge the appropriateness of place-based planning due to the overlapping scales of water management. Outside of coastal areas, watersheds are nested, with larger river basins containing smaller drainages. Thus, watersheds support not only local communities but also broader socio-ecological systems. Place-based governance can miss the impacts to downstream users and out-of-basin interests (Singleton 2002). This presents a particular challenge in the Western U.S., where overlapping political jurisdictions and widespread public land ownership mingle local and national interests. Singleton (2002) articulates the tension resulting from place-based partnerships within a federal arrangement: "A fundamental dilemma for collaborative, 'place-based' processes in natural resource management is that while the process is local, many of the sources of the problems it seeks to address and the constituencies it must respond to are not" (p. 72). Critics argue that place-based processes grant too much deference to

local resource-users, disenfranchising legitimate national and urban interests (Kenney 2000; Singleton 2002; Margerum 2007). Even when invited to participate in place-based processes, out-of-basin stakeholders often have difficulty attending meetings in remote communities and maintaining involvement in numerous partnerships (Hibbard & Madsen 2003; Leach 2006). As a result, many national groups have developed a growing distrust of place-based collaborative partnerships (McKloskey 2000; Kenney 2000; Hibbard & Madsen 2003).

The following chapters will explore the tensions surrounding external interests, lack of mutual gains, and single interest stakeholders in the Icicle Creek Subbasin of Washington State.

Chapter 3. Case Study: The Icicle Strategy

Antecedents: The need for collaborative planning in the Icicle Creek Subbasin

Icicle Creek begins at the crest of the Cascades Mountains in central Washington State. From its alpine headwaters, the creek flows east into the Wenatchee River, part of the larger Columbia River Basin that drains into the Pacific Ocean (see Figure 3.1). Most precipitation in the Icicle Creek Subbasin falls as winter snow in the Cascade Mountains and runs off as snowmelt throughout spring and summer. The timing of this snowmelt significantly impacts late season supplies for both instream and out-of-stream uses. Typically, peak flows occur in June, with runoff declining through September (Dept. of Ecology & Chelan County 2019, Ch. 3, p. 10).

The upper Icicle Creek watershed is dominated by mountains and forestland. The U.S. Forest Service manages around 87% of the 212-square mile subbasin, most of which falls within the Alpine Lakes Wilderness Area (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 5). Water resources in the upper watershed mainly support instream ecosystem services, although seven lakes in the wilderness area contain small storage dams to augment irrigation supply downstream in drought years.

The lower watershed, while much smaller in area, supports a much broader array of human water uses. All major diversions for out-of-stream uses occur on the lower six miles of Icicle Creek (see Figure 3.1). Located at the creek's confluence with the Wenatchee River, the City of Leavenworth is the only municipality to use Icicle Creek water. Dubbed the "Bavarian Village" of Washington, Leavenworth's spectacular natural setting has led to a rapid expansion in tourism.

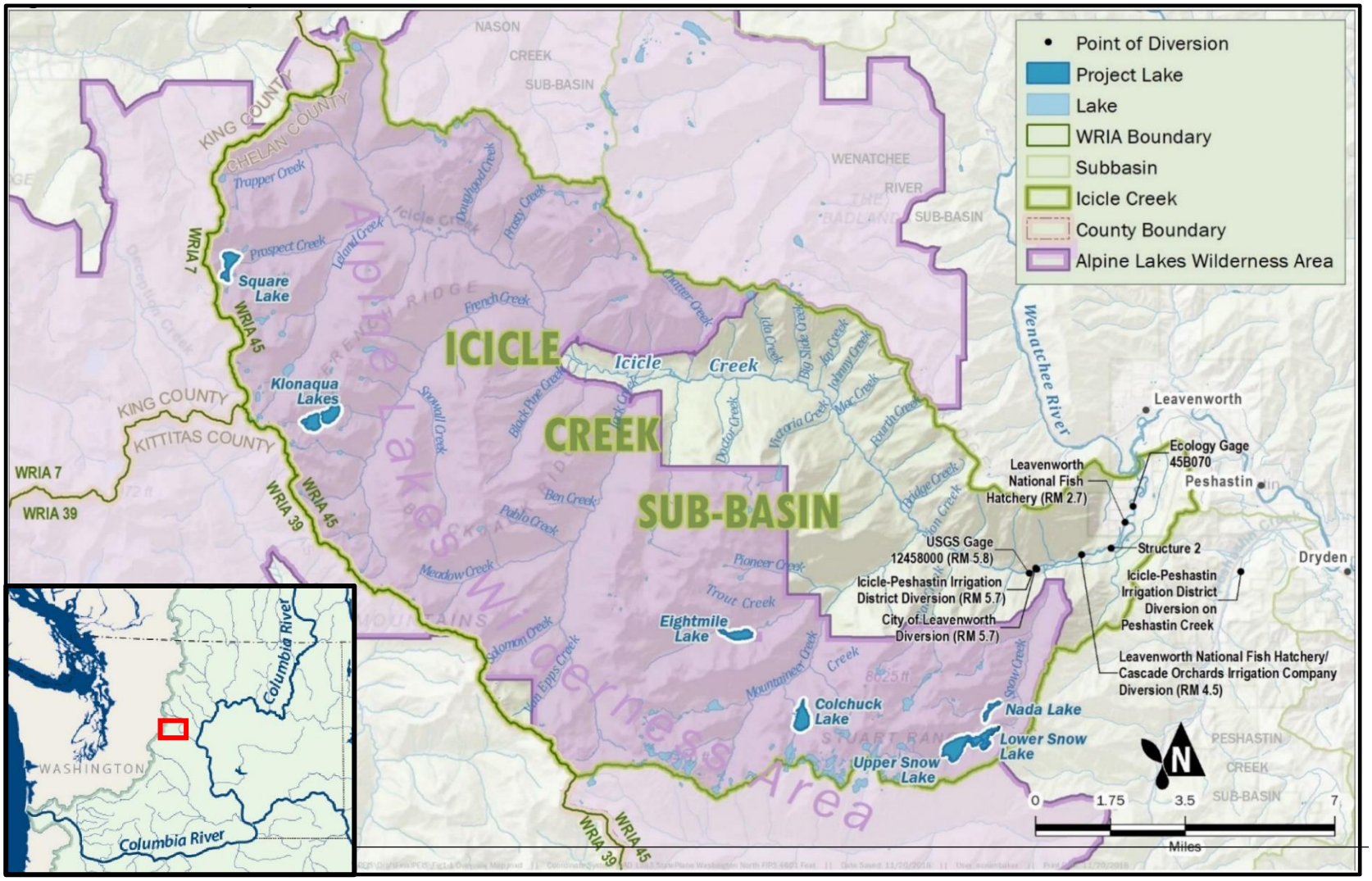

Figure 3.1: Overview Map of Icicle Creek Subbasin

(Basin map from Dept. of Ecology & Chelan County, Ch. 1, p. 6; inset map from Columbia Basin Cooperative Weed Management Area, downloaded from http://columbiabasincwma.org/)

The city's current population of 2,000 residents and approximately two million annual guests depend on a combination of Icicle Creek and groundwater sources for their municipal water supply (City of Leavenworth 2017).

Water supply has been a major concern in the subbasin for over a century. According to the Washington State Department of Ecology, "current water management practices in the Icicle Creek Subbasin fail to consistently meet the demand for instream and out-of-stream uses, including minimum instream flows for fish, municipal and domestic water supply, and agricultural water supply" (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 2). These shortages are often severe in the late summer months. To comply with the Washington Department of Ecology's 2007 Wenatchee Instream Flow Rule, minimum flows must remain at least 267 cubic feet per second (cfs) throughout the late summer and early fall. In recent drought years, however, flows have fallen to as low as 20 cfs, well below the legal requirement (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 7). Even in average years, minimum flows are typically not met (Dept. of Ecology & Chelan County 2019, Ch. 3, p. 43).

Low flows have significantly impaired the aquatic ecosystem of Icicle Creek, reducing riparian habitat, degrading water quality, and raising stream temperatures. Icicle Creek supports three ESA-listed populations of salmonids: Upper Columbia River spring Chinook salmon (Endangered), Upper Columbia River steelhead (Threatened), and Columbia River bull trout (Threatened). These species require a diversity of habitats, historical flow patterns, and a steady supply of cool water throughout the summer months. Human development along the shore of Icicle Creek has removed woody debris, created high sediment loads, and disrupted floodplain connectivity. The nearly eighty-year-old Leavenworth National Fish Hatchery (LNHF) contains

several outdated structures that impede fish passage and alter the historic channel. According to the latest Endangered Species Act biological opinion for spring Chinook, hatchery operations and infrastructure must be updated to reduce its impact on the species (Dept. of Ecology & Chelan County 2019).

The decline of these species threatens important tribal and non-tribal fisheries. The Yakama Nation and Wenatchi Band of the Colville Confederated Tribes both hold federal rights to fisheries on Icicle Creek. Through agreements with the federal government, both tribes retain fishing access in their usual and accustomed areas. On Icicle Creek, this includes the pool at the base of the LNFH spillway where tribal members catch the spring run of the hatchery-raised Chinook from platforms, using both rods and traditional dipnets. Icicle Creek also supports lamprey, trout, whitefish, and other culturally significant species. The decline in stream conditions has significantly curtailed the tribal harvest. From 2001 to 2014, there was a 90% decline in the spring Chinook caught by tribal members on Icicle Creek (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 19). These declines also affect a popular recreational fishery for salmon and trout; in 2016, 2,688 non-tribal anglers fished for spring Chinook along Icicle Creek (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 17).

Along with in-stream impacts, late season shortages threaten a number of out-of-stream uses. The sunny, temperate climate of the lower basin supports a wide array of agricultural crops, especially high-value tree fruits. Agriculture forms the largest industry in the region, providing employment for 24.1% of the residents of Chelan County (Dept. of Ecology & Chelan County 2019, Ch. 3, p. 158). Agriculture in the Icicle Creek subbasin relies on two local irrigation districts: Icicle & Peshastin Irrigation District (IPID) & Cascade Orchard Irrigation Company (COIC).

Together these districts irrigate nearly 9,000 acres with diversions from Icicle Creek. On average, irrigators in the basin face curtailment in seven of every ten years (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 4). In drought years, the IPID uses outdated, deteriorating storage dams in the Alpine Lakes Wilderness Area (ALWA) to augment their water supply. These dams require long-term infrastructure upgrades to increase the accuracy and reliability of these deliveries during shortages (see Appendix B for more details).

Domestic users are also threatened by the frequent shortages. Considering population projections for 2050, there currently are not enough urban and rural water rights to support Leavenworth's future growth (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 3). Litigation between the city and the Washington State Department of Ecology over water rights is currently on hold while the Icicle Strategy moves forward, but more legal conflicts may arise if collaborative efforts fail. Another concerned stakeholder is the Leavenworth National Fish Hatchery (LNFH). The US Bureau of Reclamation has operated the hatchery since 1940 to mitigate salmon losses from the construction of the Grand Coulee Dam. The hatchery currently has a court-mandated production target of 1.2 million fish per year and requires a reliable supply of cool, clean water to operate (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 3).

Finally, ongoing climate change has the potential to exacerbate the water resource issues in the basin. According to a US Forest Service report from 2014, the Pacific Northwest can expect an average temperature increase of 2.1°C by the 2040s (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 30). This would likely cause the historically snow-dominated Icicle Creek Subbasin to become a "rain/snowmelt transient watershed", meaning less snowpack, increased winter flooding, and earlier peak flows (Tohver 2016 cited in Dept. of Ecology & Chelan County 2019, Ch. 3, p.

100). Models for the Alpine Lake catchments predict a "shift in peak flows from June to May, with a drop in peak flows and low flows" (Dept. of Ecology & Chelan County 2019, Ch. 3, p. 108). On the mainstream of Icicle Creek, average minimum flows are projected to "decrease by as much as 75-percent in 2050 for a 2-year return period" (CIG 2017 cited in Dept. of Ecology & Chelan County 2019, Ch. 3, p. 100). Along with the threat to water supply, climate change is also predicted to raise already warm stream temperatures in the Pacific Northwest, further stressing endangered salmonid species (Mantua et al. 2010).

The Icicle Work Group and Icicle Strategy

Formation and Membership

To address these growing challenges and avoid future conflicts, Washington State Department of Ecology (Ecology) and Chelan County Natural Resource Department (Chelan County) initiated a place-based, collaborative process in the subbasin in 2012. The purpose of this partnership, the Icicle Work Group (IWG), was to develop a comprehensive basin plan, "[using] best available science to identify and support water management solutions that lead to implementation of high-priority water resource projects within the Icicle Creek Subbasin (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 8). The planning effort sought holistic, basin-wide solutions to balance the interests of in-stream and out-of-stream users, while also considering the future impacts of climate change and ensuring compliance with state and federal law. The IWG receives its legal mandate from state water law. Washington's Watershed Planning Act authorizes local partnerships to develop collaborative watershed plans. The IWG also receives funding from

the Department of Ecology's Office of the Columbia River, whose objective is to develop new water supplies within the Columbia River Basin.

At the inception of the IWG in December 2012, the co-conveners[1] extended invitations to wide variety of subbasin stakeholders, leaving participation open to any interested party or individual. Those who responded then participated in a public workshop to establish a common vision for the basin and discuss the organization of a new work group. Of the original attendees, fourteen organizations have remained IWG members throughout the process.[2] As of 2019, the IWG comprises a diverse group of nineteen stakeholders, including local, state, federal, and tribal agencies, as well as irrigation/agricultural interests and environmental organizations (see Table 3.1).

[1] Throughout this paper, "co-conveners" and "co-leads" refer to the Washington State Department of Ecology and Chelan County Natural Resource Department.

[2] Two original members (Center for Environmental Policy & Law and Wild Fish Conservancy) left between 2015 and 2016 due to concerns with the IWG's direction and disagreement with the new Operating Procedures.

Table 3.1: IWG Membership (at release of FPEIS in January, 2019)	
Tribal Governments (2)	Confederated Tribes & Bands of the Yakama Nation* Confederated Tribes of the Colville Reservation*
Federal Agencies (4)	U.S. Fish and Wildlife Service* U.S. Bureau of Reclamation* NOAA – Fisheries* U.S. Forest Service
State Agencies (2)	Washington State Department of Ecology* Washington State Department of Fish and Wildlife*
Local/Municipal Governments (3)	Chelan County* City of Leavenworth* City of Cashmere
Environmental/Conservation Interests (4)	Icicle Creek Watershed Council* Washington Water Trust* Trout Unlimited* Cascadia Conservation District
Agricultural Interests (4)	Icicle and Peshastin Irrigation District* Cascade Orchards Irrigation Company* Agricultural Representatives (2)
* Indicates founding member active since 2012.	

Operating Procedures

The IWG use the Icicle Creek Work Group Operating Procedures to guide its collaborative process. Adopted in 2016, these procedures articulate the objectives of the partnership, including its vision, mission, and Guiding Principles. They also outline specific protocols for participation, decision-making, membership changes, and conflict resolution. The IWG attempts to make all decisions through consensus. If consensus cannot be reached on a key decision, the IWG resorts to a majority vote. If a dissenting party still objects, it can then challenge the decision to a Dispute

Resolution Panel. Members can be added to or removed from the IWG through consensus vote and all are entitled to equal representation and participation. Regarding ground rules, workgroup members are required to participate regularly, treat other members with respect, openly explore interest-based solutions, resolve disputes internally, and avoid publicly undercutting the group's efforts (Icicle Work Group 2016).

To facilitate the development of the Icicle Strategy, the IWG has delegated tasks to a number of subcommittees. The Steering Subcommittee, chaired by the Washington Department of Fish and Wildlife, meets regularly to implement decisions, coordinate funding efforts, and prioritize emerging issues. Technical subgroups provide scientific support to IWG for project design and decision-making. For example, the IWG Instream Flow Subgroup, comprised of agency and tribal biologists, evaluates the effect of various projects and target flows on fish species. As co-conveners, Chelan County and Ecology hold the responsibility for organizing the state environmental review process, discussed below.

Development of Icicle Strategy

Establishing the Guiding Principles

In December 2012, Chelan County and Ecology co-convened a workshop to kickstart the IWG process. The workshop began with each stakeholder describing their most important needs and greatest concerns for the watershed. During a three-day period of open deliberation, the original IWG members developed and adopted a list of Guiding Principles. These Guiding Principles form the "centerpiece of the Icicle Strategy," a list of shared objectives that meet the needs of all members and should guide the collaborative process (Dept. of Ecology & Chelan

County 2019, Ch. 1, p. 11). Potential projects would later be evaluated by their benefit towards these goals and combined into a package plan that could comprehensively meet all Guiding Principles in a feasible and cost-effective manner. During the initial workshop, participants mutually agreed to nine Guiding Principles. This list was eventually refined to a final seven, which have since guided Icicle Strategy planning (see in Table 3.2). For a more detailed description of each Guiding Principle, see Table B in Appendix B.

Table 3.2: Guiding Principles of the Icicle Work Group	
1	**Improve Instream Flow**
2	**Improve Sustainability of Leavenworth National Fish Hatchery**
3	**Protect Treaty/Non-Treaty Fish Harvests**
4	**Improve Domestic Water Supply**
5	**Improve Reliability of Water Supply for Irrigation**
6	**Enhance Icicle Creek Habitat**
7	**Comply with State and Federal Law, including Wilderness Acts**

Developing metrics for Guiding Principles

After agreeing upon the Guiding Principles, the IWG then developed objective indicators for evaluating each principle. Termed “metrics” in the FPEIS, these criteria include quantitative

targets wherever possible to define the "magnitude of the gap between current river operations and the values expressed in the Guiding Principles" (Dept. of Ecology & Chelan County 2019, Ch. 1, p. 12). Metrics for some Guiding Principles, such as Comply with State and Federal Law, and Wilderness Acts (Guiding Principle #7), rely on narrative descriptions for measuring success. Other metrics, such those for Improve Instream Flow (Guiding Principle #1), drew from existing studies and modelling to determine the specific short- and long-term target flows (100 cfs and 250 cfs respectively) that could maximize habitat benefit. Taken together, the Guiding Principles metrics provide the objective basis for a multi-criteria analysis of the proposed projects for the Icicle Strategy.

Evaluating projects and building the Base Package

After agreeing to the Guiding Principles and their corresponding metrics, the IWG evaluated a list of sixty projects and measures proposed by workgroup members and previous planning efforts. Each project was screened by its benefits to the Guiding Principles, with special consideration given to its instream flow benefit, pedigree of water rights, and projected cost. Having evaluated all possible elements, the IWG then went through iterative exercises to aggregate the projects into a package that could meet all seven Guiding Principles. Eventually, the IWG settled on a suite of measures known as the Base Package (see Figure 3.2). As part of the Operating Procedures, the IWG members had agreed that all projects should move together as a package "to ensure that the shared vision of improved water management in Icicle Creek was achieved, as opposed to a fragmented and partial solution that could lead to further conflict" (Dept. of Ecology

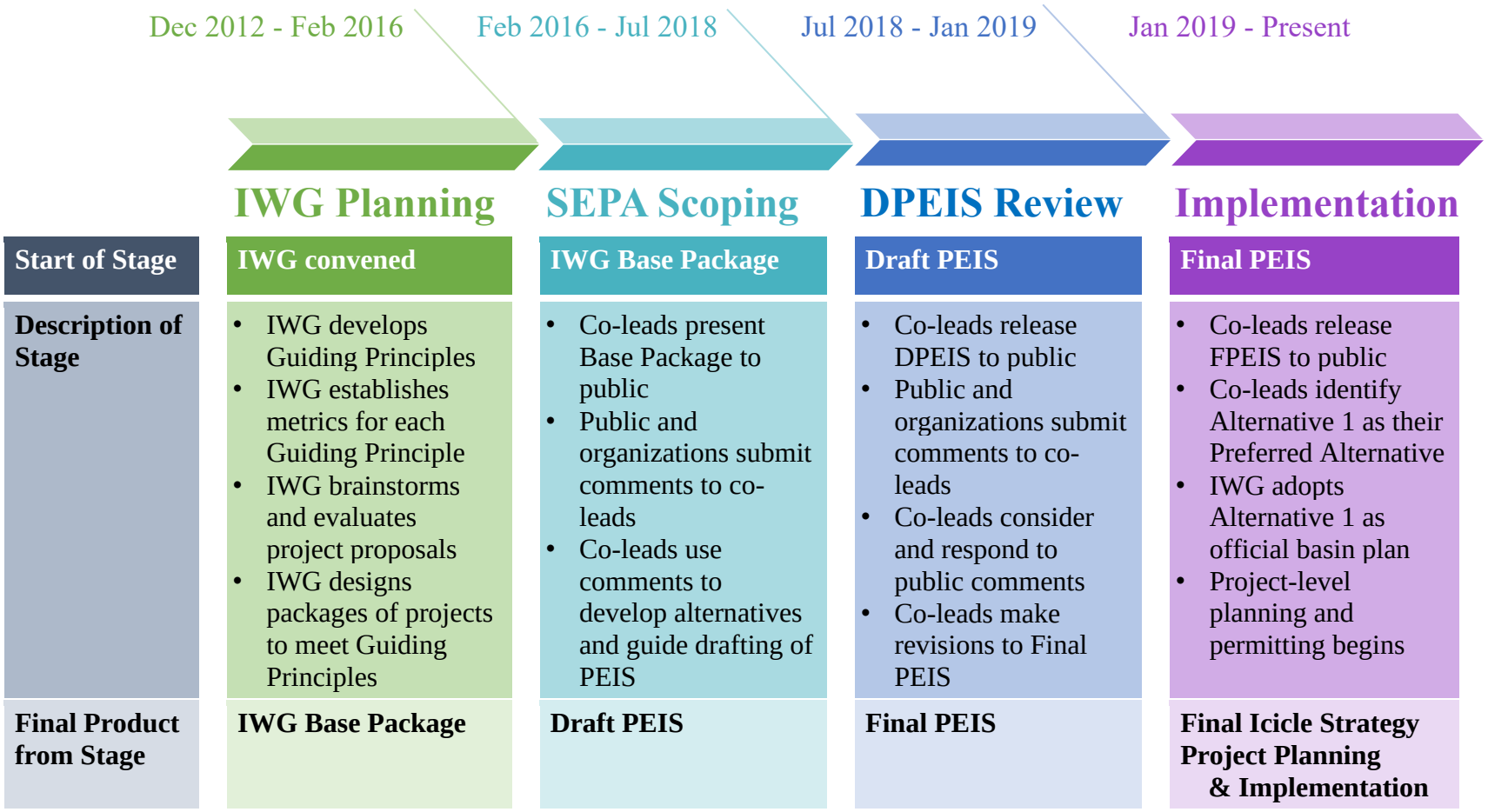

Figure 3.2: Stages of Icicle Strategy Planning Process

& Chelan County 2019, Ch. 2, p. 1). This principle did not preclude any future modifications, however. By endorsing the Base Package, the IWG presented its plan to public for environmental review while allowing for the consideration of other projects that could meet the Guiding Principles.[3]

Environmental Impact Assessment under SEPA

Under Washington State's State Environmental Policy Act (SEPA), all state and local agencies must conduct an environmental impact assessment for all projects. For the Icicle Strategy, the Washington State Department of Ecology and Chelan County served as the co-leads for this process. They chose to review the Icicle Strategy through a two a two-step process: 1) programmatic review of the comprehensive plan and 2) project-level review of the individual components of the plan.

Once it was determined that the Base Package could have significant environmental impacts, the co-leads began the scoping process (see Figure 3.2). Scoping is meant to gather public input on the proposal in order to guide the drafting of the Programmatic Environmental Impact Statement (PEIS). The co-leads organized several public meetings in which they presented the Base Package and solicited public feedback on what information to include in the PEIS document and which alternatives to consider.

[3] As discussed in the Results, some external stakeholder organizations dispute the notion that IWG and co-lead agencies ever truly considered options outside the original Base Package (see Chapter 5: Results).

In response to these scoping comments, the co-leads developed four alternative plans in addition to the Base Package and No Action Alternative. Each alternative contains a distinct suite of projects and measures, providing a range of options that the co-leads determined could "meet the objectives of the Guiding Principles, but with different emphases, costs, benefits, and impacts" (Dept. of Ecology & Chelan County 2019, Ch. 2, p. 10). See Table 3.3 below for a brief description of each alternative:

Table 3.3: Alternatives Presented in Draft and Final PEIS

Alternative	Description
No Action	Some individual projects may be implemented but on uncertain timeline and without cooperative benefits
Alternative 1 (Preferred Alternative)	Base Package of projects selected by IWG
Alternative 2	Replaces Alpine Lakes Optimization, Modernization, and Automation project with a pump exchange from the Wenatchee River
Alternative 3	Removes infrastructure projects in ALWA from official Icicle Strategy (though it recognizes IPID would likely still implement them)
Alternative 4	Expands storage capacity in Alpine Lakes with higher dams
Alternative 5	Changes IPID point of diversion from Icicle Creek to Wenatchee River

The co-leads released the Draft Programmatic Environmental Impact Statement (DPEIS) with these alternatives to the public in May 2018. This began a sixty-day public comment period, during which the public could submit comment letters to the co-leads about the DPEIS and the alternative plans. After considering the public input, the co-leads made revisions for the final version of the PEIS (FPEIS) to complete the programmatic review.

Implementation of Icicle Strategy

The co-leads released the Final PEIS (FPEIS) on January 3, 2019 and identified Alternative 1, the original Base Package, as the Preferred Alternative. Ultimately, the co-leads determined that the Base Package was the best alternative to fully meet the Guiding Principles, had the highest likelihood of funding, and would cause the lowest environmental footprint (Dept. of Ecology & Chelan County 2019, Ch. 2, p. 2). With the completion of programmatic review, the IWG agreed with the co-lead's determination and adopted the Base Package as its comprehensive plan moving forward. As of February 2019, the Icicle Strategy has moved on to project-level planning, permitting, and review.

Chapter 4. Methods of Analysis

To examine how the Icicle Strategy planning process addressed the concerns of external wilderness stakeholders, this study analyzes the comment letters submitted during the SEPA process. The Final Programmatic Environmental Impact Statement (FPEIS) provides a detailed public record of the planning process, including every comment letter received by the co-leads and their official response. Available online, these comment letters provide an accessible and efficient data source for exploring the concerns of the external organizations and the impact their comments had on the planning process. This chapter outlines the key data sets taken from the FPEIS and the method of analysis for each data set.

Data Sources

Over eight thousand total letters were submitted to the co-leads during the SEPA scoping and DPEIS comment period. Purposeful selection (Palinkas et al. 2015) was used to limit the sample to only those letters submitted by external stakeholder organizations. For the purpose of this study, external stakeholder organizations are defined as organizations outside the Icicle Work Group who submitted public comments during the SEPA process.[4] Although this sample excludes individual stakeholders and interested groups that chose not to submit letters, it does capture the organizations that sought to formally influence the decision-making process through public comment.

[4] It is important to distinguish that "external" in this context pertains to membership in the Icicle Work Group, not to location within the Icicle Creek Subbasin. Thus, "external" does not necessarily equate with "non-local" by this definition− it simply distinguishes whether or not an organization was formally involved in the collaborative planning process.

Scoping comments were published in the FPEIS under Appendix B: SEPA Responsiveness Summary.[5] Since these comments are not organized by stakeholder type, it was necessary to review each letter to identify which ones were officially endorsed by an external stakeholder organization or representative. After screening the 49 total scoping comments, it was found that five had been submitted by external stakeholder organizations (see Table 4.1). However, these letters were endorsed by 44 individual organizations, since several letters have multiple signees.

Table 4.1: Overview of Scoping & DPEIS Comment Letters

	Total Unique Comments*	Total Unique Comments from External Stakeholder Organizations	Number of External Stakeholder Organizations Represented
SEPA Scoping	49	5	44
DPEIS Comment Period	408	16	39

** As 'unique comments', this number excludes the repetition of the 8,422 form letters.*

The DPEIS comment letters were located in Appendix A of the FPEIS under "DPEIS Comments & Responses". The FPEIS categorizes the public comments by source type, making it easy to identify the letters from external stakeholder organizations. Overall, there were 11 individual letters endorsed by 39 organizations. As with scoping comments, some comment letters were co-signed by multiple organizations. There were also five form letters submitted by the

[5] All publicly available SEPA materials, including the FPEIS, can be accessed on the County of Chelan website: https://www.co.chelan.wa.us/natural-resources/pages/environmental-review.

members of concerned organizations.[6] These letters were included as a critical part of the dataset since they comprise 8,422 of the 8,825 total comments submitted to the co-leads. After final sampling, the study analyzed 16 unique comment letters endorsed by 39 distinct organizations (see Table 4.1).[7]

Data Analysis

Scoping Comments & Responses

There were only five total comment letters submitted by external stakeholder organizations during the SEPA scoping period.[8] Due to the limited sample size, it was impractical to perform the complete thematic analysis that would be conducted on the DPEIS Comment Letters. Instead, the comment letters were read multiple times, with the main concerns underlined and noted. Related themes were then grouped and summarized. These summaries give an overview of the scoping concerns to complement the larger DPEIS comment letter data set and illustrate how the concerns changed between stages of the SEPA process. The official co-lead responses to these comments were also synthesized and summarized in the results (see Chapter 5: Results).

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[6] A "form letter" refers to a prepared comment from an organization, which its members then endorse and submit individually.

[7] There were five organizations that sent an official comment letter and also prepared a form letter for their members to submit. In this case, both the organizational letter and form letter were analyzed.

[8] This includes one comment (Scoping Comment 48) which simply endorses the positions of another (Scoping Comment 32).

DPEIS Comment Letters: Reflexive Thematic Analysis

To analyze the DPEIS comment letters, this study employs a quantitative content analysis method known as reflexive thematic analysis (Braun et al. 2018).[9] Bowen (2009) characterizes thematic analysis as "a form of pattern recognition within the data, with emerging themes becoming the categories for analysis" (p. 32). Using this method, the researcher identifies themes through a close reading and careful interpretation of the texts. Braun et al. (2018) defines these themes as "meaning-based patterns", which reveal themselves in "explicit (semantic) or conceptual (latent) ways" (p. 6). Thus, thematic analysis attempts to capture both the direct and underlying meanings of the texts. A reflexive (or inductive) approach generates the themes directly from texts themselves rather than fitting the data into existing theories or preconceived frameworks (Hsieh & Shannon 2005).

To organize the data into themes, the researcher develops codes that can categorize similar information. Coding is a dynamic and iterative process; codes are combined, separated, and modified as needed. Codes can later be grouped into related themes or generalized categories depending on the framework that best fits the data set. Ultimately, the goal of coding is to "provide a coherent and compelling interpretation of the data, grounded in the data" (Braun et al. 2018, p. 6). Applied to the DPEIS comment letters, this method explores the range, frequency, and patterns of themes surrounding the Icicle Strategy proposals.

[9] There are a number of terms for similar methods of qualitative content analysis: inductive content analysis (Elo & Kyngäs 2008), conventional content analysis (Hsieh & Shannon 2005), and exploratory thematic analysis (Guest et al. 2012). This study adopts the terminology of Braun et al. (2018) since the analysis follows their basic steps for reflexive coding.

Scope and Identification of Themes

The DPEIS comment letters contain complaints, concerns, and recommendations about many aspects of the Icicle Strategy. This study focuses on the issues surrounding infrastructure development within the Alpine Lakes Wilderness Area (ALWA), specifically the Alpine Lakes Optimization, Modernization, and Automation Project and the Eightmile Lake Storage Restoration Project (see Appendix B for a detailed description of these projects). Themes related to other elements of the plan fall outside the scope of this investigation. The analysis does consider procedural concerns related to the IWG and the SEPA planning process. Although the identification of themes was guided by the content itself (rather than a predetermined codebook), consideration was given to themes related to both process and outcome. Comments on outcomes were also differentiated by their focus: some were position-based (relating to specific policies or actions) while others were interest-based (relating to specific values).

Five Step Analysis of Materials

The DPEIS comment letters were analyzed using a modified version of Braun et al.'s (2018) steps for reflexive thematic analysis, combined with Guest et al. (2012)'s guidelines for applied thematic analysis. There were five basic steps to this process:

1. ***Familiarization***: First, the researcher explored the comment letters to gain a preliminary understanding of their content. This step involved carefully reading the texts, making preliminary notes, tagging recurrent concepts, and identifying emerging themes. The researcher read through each letter multiple times to ensure good familiarity before moving on to coding.

2. ***Codebook Development***: The next step was to systematically identify relevant codes within the comment letters. These codes capture common patterns of meaning within the data and serve as the first layer of metadata for the texts.[10] The initial list of codes was based on notes from the familiarization. This list was then compiled into a codebook, which includes clear definitions and examples for each theme.[11]
3. ***Coding the Texts****:* Using the draft codebook, the researcher re-examined the full dataset, coding the texts and noting any missed themes.[12] Following an iterative process, the coding and codebook were again refined to better capture the themes within the texts.
4. ***Categorizing Codes & Constructing Themes****:* Once the coding process was completed, the codes were organized into themes, sub-themes and thematic groups. Each theme articulates a distinct position, interest, concern, argument, or belief. Some of these themes also contain sub-themes, which describe a specific component or detail. While the primary themes capture the breadth of the messages within the DPEIS comment letters, the sub-themes add depth in describing each concern. The thematic groups generalize related themes into logical categories.

[10] Guest et al. (2012) defines a code as "a textual description of the semantic boundaries of a theme or a component of a theme" (pg. 51).

[11] Following the advice of Guest et al. (2012), the codebook contains the following information for each code: label, short definition, long definition with instructions on when to use, and a direct example from the texts (see Appendix C: Codebook).

[12] The unit for coding themes was the entire sentence. A single sentence could contain multiple distinct codes if applicable.

5. ***Reporting Findings****:* The comprehensive results from the coding are presented in Appendix D: Overview of Themes in DPEIS Comment Letters, which shows the themes and sub-themes contained in each of the DPEIS comment letters. The themes and sub-themes are organized into categories and listed by relative code frequency.[13]

Quality Control

Quality control is central to all qualitative research. Since such studies rely on the discretion of the researcher, the methods must be both valid and reliable (Guest et al. 2012). Validity requires that methods are logical and closely capture the phenomena they are meant to measure (Guest et al. 2012). To illustrate validity, the study must be transparent in its methods and directly link the results to the data (Elo & Kyngäs 2008). Reliability entails that the methods be consistent and standard in their application. Reliability is the greatest concern with qualitative research due to the reliance on the researcher's interpretation (Guest et al. 2012). Failing to understand the context can lead to missed themes during coding (Hsieh & Shannon 2005).

For thematic analysis, the first measure of quality control is prolonged engagement with the texts. Since this study employs a reflexive approach, it required full immersion and re-reading of the texts to refine the codebook. To document the evolution of the coding, each step was clearly recorded to maintain an audit trail (Guest et al 2012).[14] The codebook provides clear definitions and explicit directions for coding to reduce ambiguity and provide transparency.

[13] Code frequency is the total number of individual letters that mentioned each theme.

[14] An audit trail "keep[s] track of and document[s] the entire data analysis process" (Guest et al. 2012, pg. 93).

The coding also went through an intercoder reliability test (Guest et al. 2012) with a peer reviewer.[15] The peer reviewer was provided two of the fifteen DPEIS comment letters (13% of the total sample) and asked to identify the primary themes found in each text using the codebook (see Appendix C: Codebook). The results from the peer review tests were then compared with the original study results from to verify the clarity of the codebook and the test for coding accuracy. The peer reviewer's identification of primary themes matched the coding results with 80% accuracy.

Responses to SEPA Comments

Finally, to gauge the influence of the external concerns on the planning process, this study examined the co-leads' official responses to the DPEIS comment letters. SEPA requires that the lead agency respond to all public input during the scoping and DPEIS review process. Appendices A and B of the FPEIS provide a detailed response to each letter received from the external stakeholder organizations, explaining how the co-leads engaged with their concerns. For the DPEIS comment letters, the co-leads provide an overview ("Responses to Common Issues") as well as individual responses to each letter. This study analyzes these co-lead responses in relation to the specific themes identified in the codebook (see Appendix C: Codebook). Responses to each theme were noted, summarized, and synthesized. Eventually, the responses were summarized in Table E, which provides a comprehensive description of how each theme was addressed (see Appendix E: Co-lead Responses to Themes).

[15] The peer reviewer was Dr. Mary Santelmann, Associate Professor in the College of Earth, Ocean and Atmospheric Sciences at Oregon State University.

Chapter 5: Results

After analysis of the scoping and DPEIS comment letters, six thematic groups emerged:

- **Positions**: Articulate specific positions on the Icicle Strategy alternatives and how the planning process should move forward.
- **Concerns about IWG**: Criticize the Icicle Work Group and its collaborative planning process.
- **Concerns about DPEIS & SEPA**: Identify deficiencies in the co-leads' environmental review of the Icicle Strategy, including both substantive concerns about the DPEIS content and procedural concerns about the SEPA process.
- **Legal concerns**: Express concerns that certain projects included in the Icicle Strategy are or may be illegal.
- **Concerns about impacts to the ALWA**: Express concerns about specific impacts to the Alpine Lakes Wilderness Area from the Icicle Strategy.
- **Concerns about national wilderness system**: Express concerns about the national scale impact that the infrastructure projects within the ALWA may have on the federal wilderness system as a whole.

This chapter provides a narrative summary of the key themes raised in the SEPA process and outlines how the co-leads addressed these concerns in their responses. For additional detail on the results, refer to the Codebook (Appendix C), Overview of Themes in DPEIS Comment Letters (Appendix D), and Co-Lead Responses to Concerns (Appendix E).

Positions

During the scoping period, external stakeholder organizations expressed deep concerns about the direction of the Icicle Strategy but gave few concrete positions. Only one commenting organization, the Wise Use Movement, "strongly oppose[d]" the Icicle Strategy and demanded the plan should be withdrawn (Scoping Comment 24).

During the DPEIS comment period, with the more information and the full set of alternatives available, the external stakeholder organizations expressed clear positions, preferences, and demands. The most prominent position by far was that the DPEIS itself was not suitable for consideration and must be withdrawn, revised, and re-released. Proponents argued that the DPEIS contained too many flaws or omissions to move directly to the final version. This demand for withdrawal and reconsideration featured prominently in eleven of the thirteen comment letters (see Table 5.1).

Table 5.1: Positions in DPEIS comment letters

Position	Letters	Co-Lead Response
Withdraw, revise, & re-release	**11**	**Rejected and explained**: DPEIS is sufficient and no major changes were made
Oppose projects within ALWA	**8**	**Rejected and explained**: ALWA projects are essential to meeting Guiding Principles
Oppose Eightmile Restoration	**6**	**Rejected but possible**: Project included in Preferred Alternative but may be modified in project planning
Oppose Alternative 4	**4**	**Accepted:** Alternative 4 not selected as preferred alternative
Support Alternative 5	**4**	**Rejected:** Alternative 5 not selected as preferred alternative
Conservation first	**3**	**Partially accepted**: Some additional conservation measures added

External stakeholder organizations also presented clear positions on specific project proposals. Six comment letters opposed the development of new infrastructure within the ALWA and demanded their removal from the Icicle Strategy. A related position held that no new storage projects should be considered while conservation gains still existed in the subbasin. Regarding the Eightmile Lake Storage Restoration project, three letters asserted that while repairs may be necessary, the dam should be maintained at its current height, rather than restored to its original capacity.

Regarding the alternative plans presented in the DPEIS, the comment letters also advocated for or against certain packages. Commenting organizations strongly opposed Alternative 4 and showed general support for Alternative 5. Alternative 4 proposed the greatest infrastructure development within the ALWA, including three lake enlargements and the boring of a tunnel between Upper and Lower Klonaqua Lake. Instead, some organizations saw Alternative 5 as the least damaging package, since it involved moving the IPID's point of diversion from Icicle Creek to the Wenatchee River.

The co-leads generally failed to meet the positions of the external stakeholder organizations in their responses to the comment letters. By releasing the FPEIS, the co-leads rejected the premise that the draft must be withdrawn and revised before reconsideration. Despite the criticisms, the co-leads maintained that the DPEIS had been accurate and in appropriate detail for programmatic review. Since they had made no major changes to the alternatives and had discovered no new information on impacts, the co-leads found it appropriate to proceed directly to the FPEIS and identify a Preferred Alternative.

Support or opposition to specific alternatives and projects was "noted" by the co-leads. Neither Alternative 4 nor Alternative 5 were selected as the Preferred Alternative. Responding to demands for increased conservation before increased storage in wilderness, the co-leads did add some conservation measures to each alternative. However, their Preferred Alternative retained the infrastructural projects within the ALWA since the co-leads deemed these measures essential to meeting the Guiding Principles. The co-leads also chose not to limit the Eightmile Lake dam repairs to a lower height, although they specifically did not preclude this possibility in project-level planning.

Since the co-leads rejected the main positions of the comment letters by releasing the FPEIS and making no changes to wilderness-based projects in the Preferred Alternative, it is unlikely that these responses met the concerns of the external stakeholder groups.

Concerns about the Icicle Work Group

Concerns about the IWG appear in a small but prominent portion of the sample. Criticism began during scoping; a strongly-worded letter from the Wise Use Movement characterized the IWG as a "small cabal" dominated by financial interests, which discouraged public participation from outsiders (Scoping Comment 24). Their opposition stemmed from a poor experience with the Yakima Plan, a similar place-based collaboration organized by the Washington State Department of Ecology. The commenters felt that the Yakima planning process had been deeply flawed and that the co-leads made a mistake by following its model in the Icicle Creek Subbasin.

This distrust continued into the DPEIS comment period (see Table 5.2). Three letters brought up complaints about the IWG and its collaborative planning process. Some organizations

felt that the IWG members did not adequately represent the interests in the subbasin, characterizing the IWG as "a small group of Ecology-OCR and Chelan County handpicked organizations" (DPEIS Comment Letter 22). Specifically, letters noted a lack of representation by environmental groups and a feeling that the group favored local, eastside interests over urban, westside ones.

Table 5.2: Concerns about IWG in DPEIS comment letters

Concern	Letters	Co-Lead Response
IWG not representative	**3**	**Disagreed but invited**: IWG is open group and welcomes interested parties
Issues with process	**2**	**Partially addressed:** IWG meetings are open to public; other complaints not addressed
Flawed Guiding Principles	**2**	**Disagreed:** Guiding Principles have widespread community support

Along with concerns about the group's composition, there was also criticism over how the IWG had run the collaborative process. Some external organizations felt that the restrictions on public disagreement and refusal to reconsider controversial projects had marred the collaborative dynamic and dissuaded environmental groups from joining. Along with internal issues, outside organizations also felt that the IWG had not been receptive to valid public concerns in developing the Icicle Strategy. Due to these issues with the IWG process, two comment letters felt the Guiding Principles were illegitimate.

In the FPEIS response to these criticisms, the co-leads defended the IWG's receptiveness and inclusivity. They responded that the IWG continued to welcome outside groups to participate and had solicited public comment in every meeting. The co-leads also disputed the assertion that the Guiding Principles did not have widespread public support. Ultimately, the concerns of some

external stakeholders and the responses from the co-lead reveal two fundamentally dissonant views of the IWG and its legitimacy.

Concerns about DPEIS & SEPA

Concerns about the SEPA process and the DPEIS make up a bulk of the comment letters. Scoping comments demanded a full range of alternatives, not just Action/No Action option as had occurred with the Yakima Plan (Scoping Comment 32). The letters suggested a number of scenarios that should be considered as alternatives: no infrastructural projects within the ALWA (Scoping Comments 24, 32, & 35), the removal of the existing dams within the ALWA (Scoping Comments 24 & 32), the relocation of the IPID point of diversion from Icicle Creek to the Wenatchee River (Scoping Comments 32 & 35), and aggressive conservation measures (Scoping Comment 32). Along with these specific requests, there was concern that the SEPA process should not be constrained by the Guiding Principles or biased by the IWG's previous investment in developing the Base Package (Scoping Comments 24 & 32). These letters felt the identification of a "Preferred Alternative" in the DPEIS would unfairly predetermine the decision-making process, avoiding fair consideration of all alternatives. Finally, multiple scoping letters questioned the co-leads' ability to impartially guide the SEPA process (Scoping Comments 2 & 24). They noted a conflict of interest in their dual roles as invested IWG members and the public agencies responsible for environmental review. Since the co-leads had actively participated in the development of the Base Package, commenting organizations felt the co-leads would be biased toward approving the IWG's original plan.

In response to these scoping concerns, the co-leads avoided making any specific commitments but provided assurances that they would describe the impacts of all project proposals and provide a full range of alternatives in the DPEIS. Relevant information would specifically include streamflow studies, the impacts of reservoir drawdowns, the potential effects to recreation, and a history of the plan's development. The co-leads noted that, despite the characterizations in the comments, the Alpine Lakes are already reservoirs and the proposals within the Icicle Strategy would simply improve their operation. Responding to the request for alternative plans, the co-leads committed to a full range of reasonable alternatives along with the original Base Package. Finally, the co-leads from the Department of Ecology and Chelan County "noted" the objections to their dual roles as both IWG members and SEPA co-leads, but provided no further actions to resolve this concern.

Yet, complaints about the co-lead's performance continued following the release of the DPEIS. Nearly every DPEIS comment letter (twelve out of thirteen) noted a deficiency in the draft document or a mishandling of the SEPA process (see Table 5.3). The commenting organizations generally mobilized these themes to advocate the position that the DPEIS be withdrawn and revised (Theme A). The most prominent criticism of DPEIS document was that the information was inadequate, either incomplete or inaccurate. These criticisms most commonly requested more legal analysis on the wilderness-based projects.

Inherent to the criticism of the DPEIS's level of detail was the belief that a phased review was inappropriate. Many commenting organizations felt that this approach deferred important considerations and allowed potentially illegal projects to move forward without scrutiny. As the Wilderness Society argued, the phased review "is improperly piecemeal, precludes analysis of

cumulative impacts, and threatens to create administrative inertia for the Icicle Strategy before its impacts are fully understood" (DPEIS Comment Letter 20). Without full details at the programmatic stage, outside organizations argued that selecting a preferred package was inappropriate.

Table 5.3: Concerns about DPEIS & SEPA in DPEIS comment letters

Concern	Letters	Co-Lead Response
Inadequate information	**9**	**Disagreed and explained**: Sufficient level of detail for programmatic level review
Phased review inappropriate	**9**	**Disagreed but clarified in FPEIS**: Phased approach provides comprehensive overview; FPEIS revised to clarify review process
Not a reasonable range of alternatives	**4**	**Disagreed and explained**: Alternatives were developed in response to scoping, were accurately portrayed, and appear feasible
Not enough mitigation	**3**	**Disagreed and explained**: Sufficient level of detail for programmatic level review
Issues with SEPA process	**2**	**Disagreed and explained**: SEPA began at earliest possible point to guide decision-making and was conducted diligently

Another major theme was the failure of the DPEIS to present a reasonable range of alternatives, as required by SEPA. The most common criticism was that all the alternatives in the DPEIS included infrastructure projects within the ALWA. As one group of organizations pointed out, "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" (DPEIS Comment Letter 12). By failing to consider a non-wilderness option, the co-leads had merely presented variations on the same theme without fulfilling their SEPA obligation to consider less damaging, off-site alternatives. Even the No Action Alternative included the Eightmile Lake Storage Restoration and the Alpine Lakes Optimization, Modernization, and

Automation projects. This inclusion led the Wilderness Society to object, “The no-action alternative here is far from a ‘benchmark’ and is instead defined to include a significant amount of the “action” proposed by the Icicle Strategy” (DPEIS Comment Letter 20). Other sub-themes criticized the lack of conservation measures, unclear mitigation for impacts, and the failure of the co-leads to consider alternatives with dam removals.

Finally, three comment letters specifically disapproved of the co-leads’ handling of the SEPA process. These organizations felt that the process had no left a real chance for public debate and had not addressed specific concerns raised during scoping. Some organizations felt that the co-leads had focused too narrowly on following the IWG’s original plan rather than fulfilling their SEPA requirements.

In general, the co-leads disagreed with the criticisms of their handling of the DPEIS and SEPA process and provided justifications for their decision-making. In response to the DPEIS comment letters, they assured critics that they had followed SEPA guidelines diligently and produced an acceptable PEIS. They maintained that the DPEIS analyzed the impacts of each alternative in appropriate detail for programmatic review and that specific measures from the Preferred Alternative would be reviewed in further detail during project-level analysis. While the co-leads refined and clarified some sections of the FPEIS in response to comments, they felt there was no need for significant changes.

Responding to criticisms of the phased review, the co-leads responded that programmatic review is intended to give decision-makers a comprehensive view of alternatives. SEPA requires lead agencies to release the DPEIS at the earliest possible date so that it can guide the decision-making process. However, the co-leads noted that a programmatic EIS cannot predetermine which

projects will ultimately be permitted, re-iterating that project-level planning will review specific impacts in detail.

In response to criticisms of the alternatives, the co-leads also argued that a full range of options had been developed in response to scoping comments. All alternatives were covered in appropriate detail, appear to be legal, and could feasibly meet the IWG's objectives. The Eightmile Lake Storage Restoration was listed in each alternative for the sake of transparency– the IPID intends to implement this project whether or not it is included in the IWG's Preferred Alternative. Thus, the co-leads argued, the No Action Alternative realistically portrays what will happen if the Icicle Strategy is not adopted. Alternatives involving dam removals were considered but rejected since they could not feasibly meet the Icicle Strategy's objectives.

Finally, the co-leads defended their compliance with SEPA protocol. Per state law, they began scoping and released the DPEIS at the earliest possible moment so that public input could guide decision-making. The alternatives presented in the DPEIS were developed in response to public comments from scoping. The co-leads also assured the public that they would conduct further project-level review if needed.

Legal concerns

During scoping, every commenting organization raised legal questions about the wilderness-based projects in the Base Package. The dominant concern was that the IWG and co-leads had failed to consider the compatibility of the proposed projects with the federal Wilderness Act and ALWA management plans. To address this uncertainty, external organizations requested that the DPEIS discuss applicable wilderness laws and that the co-leads consult with the US Forest

Service over whether such projects would need to be replaced (Scoping Comments 24 & 32). Scoping comments also requested that the DPEIS analyze existing water rights in the basin to determine whether the IPID had maintained its full storage rights at the Eightmile Lake (Scoping Comments 2, 32, & 35) and requested clarification about the integration of the National Environmental Protection Act (NEPA), a parallel review process required for federal projects (Scoping Comments 24, 32 & 25).

Responding to these scoping questions, the co-leads assured the public that the Icicle Strategy would comply with all state and federal laws, including the Wilderness Acts, as stated in IWG Guiding Principle #7. The co-leads also stated that the DPEIS would consider the existing easements, necessary permits, water rights, and NEPA analysis required for each proposed project.

Nevertheless, the exact same concerns and doubts prevailed throughout the DPEIS comment letters. External organizations mentioned three main legal concerns (see Table 5.4). Most prominently, many organizations worried that the Icicle Strategy would violate federal wilderness laws. These organizations argued that the IPID easement to operate the dams in the ALWA does not supersede the Wilderness Act. Thus, the infrastructural modifications in the ALWA would violate Section C, which prohibits the use of mechanical equipment, roads, and air transport in federal wilderness. Some comment letters also expressed concern that the wilderness projects would or may violate the USFS's management rules for the ALWA, as outlined in the Alpine Lakes Area Management Act of 1976 and the Alpine Lakes Wilderness Management Plan.

The second legal theme questioned the status of the IPID's state water rights. Pointing to the deterioration of the Eightmile Lake Dam, commenting organizations questioned whether the IPID had relinquished or forfeited some of its original storage rights. Without full rights, the IPID

would not be able to restore the Eightmile Lake Dam to its original capacity. These comments argued that the Washington State Department of Ecology should perform an 'extent and validity determination' to certify IPID's water rights before considering alternatives that may be illegal.

Table 5.4: Legal Concerns in DPEIS comment letters		
Concern	**Letters**	**Co-Lead Response**
Illegal under federal wilderness laws	**9**	**Disagreed but will be reviewed**: Exceptions to wilderness laws will likely apply, but compliance will be reviewed able in project-level planning
Illegal under state water law	**8**	**Disagreed but will be reviewed**: Exceptions to water rights abandonment will likely apply, but this determination has not yet been triggered
Requires NEPA review	**5**	**Acknowledged and will occur**: NEPA will be conducted by USFS for federally permitted actions

The third, slightly less prominent, theme raised concerns that planning had moved forward without appropriately considering the requirements of the National Environmental Policy Act (NEPA). NEPA requires a separate review process for all actions with a federal nexus, which would include the infrastructure proposals within the ALWA. Some commenting organizations felt that the NEPA review should occur before selecting a preferred alternative, since certain projects may not pass the additional review.

The co-leads responded to these challenges by explaining why the projects in question had passed programmatic level legal analysis and outlining when a future review of rights and project permitting would occur. Answering concerns about federal wilderness laws, the co-leads noted that the USFS is an active member of IWG and had been directly involved in planning. The USFS and the IPID would determine the conditions of the easement so that it complies with the Wilderness Act and ALWA management plans. Further review for wilderness compliance would occur during project-level planning when complete knowledge of design and construction details

were available. The co-leads also noted that provisions of the Wilderness Act make exceptions for pre-existing property rights and allow access to private inholdings. The IWG and co-leads believe that these provisions create a strong legal basis for authorizing the dam modifications.

Responding to concerns about IPID's storage rights at Eightmile Lake, the co-leads contended that they had appropriately considered state water law. While a water right can be relinquished by non-use or abandonment under Washington State law, there are exemptions that likely apply to IPID's rights to Eightmile Lake. This legal determination would occur during an extent and validity analysis, which is triggered by a water right permitting action. Since no permitting actions had yet occurred for any project, there had not been a determination.

The lead agencies also recognized the need for NEPA analysis on all projects with a federal nexus and had been actively coordinating with USFS for projects based in the ALWA. This NEPA analysis will occur during project-level planning, and the FPEIS clarified the USFS's role.

Concerns about ALWA

Throughout the SEPA process, most comment letters were motivated by a concern for the impacts to the Alpine Lakes Wilderness Area. During scoping, the external stakeholder organizations expressed a personal investment on behalf of their members for protecting the ALWA. According to one group of organizations, the ALWA is the wilderness area "nearest to the millions of people who live in the Puget Sound metropolitan area" and "took many years of struggle and hard work by members of our non-profit organizations to establish" (Scoping Comment 32). Considering the original Base Package, these external stakeholders were concerned about the impacts that the wilderness-based projects would have on the Alpine Lakes (Scoping

Comments 24, 32 & 35). Scoping comments requested that all the DPEIS analyze impacts to aesthetics, lake ecology, user experience, trails, and campgrounds (Scoping Comment 35). Some commenting organizations felt the scoping information had misrepresented projects by exaggerating the benefits. Scoping comments objected to the characterization of infrastructure modifications as "improvements" and Alpine Lakes as "reservoirs". The Wise Use Movement felt these word choices revealed that the Chelan County Natural Resource Department had "little appreciation of and little understanding of wilderness or wilderness values" and is "more interested in dismantling and destroying natural resources than preserving, protecting, or enhancing" (Scoping Comment 24). There was also a feeling that co-leads had hidden the wilderness impacts from the public and were conducting a programmatic review to avoid the consideration of project-specific impacts (Scoping Comment 24).

In response to scoping concerns, the co-leads assured external organizations that the DPEIS would assess all potential wilderness and recreation impacts of the proposed projects. The co-leads noted that the Alpine Lakes were already used as reservoirs; the proposed projects sought to improve their operations and any changes in drawdown patterns would be analyzed in programmatic review.

After the release of the DPEIS, however, external stakeholder organizations remained deeply concerned about the potential impacts to the ALWA (see Table 5.5). Nine commenting organizations described a distinct connection to the wilderness area and a vested interest in its protection. Several organizations had lobbied for the original designation of the ALWA as federal wilderness in 1976 and others had local members who had created and maintained trails. Two of the organizations (the Alpine Lake Foundation & Alpine Lakes Society) were specifically

dedicated to the protection of the ALWA, while some national organizations had local chapters with a particular interest in the area.

Table 5.5: Concerns about ALWA in DPEIS comment letters		
Concern	**Letters**	**Co-Lead Response**
Attachment to place	**9**	**Noted and explained**: Projects will not affect the Enchantments or PCT
Wilderness values	**9**	**Covered in FPEIS**: Preferred Alternative would comply with law and cause "less than significant" wilderness impacts
Recreation values	**8**	**Covered in FPEIS**: Impacts should be short in duration and would not affect most popular areas or flood trails
Scenic values	**7**	**Covered in FPEIS**: Further review will occur in project-level analysis
Ecological values	**7**	**Covered in FPEIS**: Natural conditions do not currently exist and adverse impacts are unlikely

Concerns about the Icicle Strategy's impact on the ALWA centered on the threat that infrastructure modifications posed to wilderness values. As the comment letter from the Pacific Crest Trail Association argued, "Wilderness is the highest form of protection for our nation's public lands. This proposal, as written, would be a severe blow to what should be sacrosanct" (DPEIS Comment Letter 19). The comment letters specifically condemned the introduction of mechanical equipment, use of helicopters for construction, and proposed tunneling (in Alternative 4) as intrusions into the primitive nature of the area. Wilderness concerns were closely intertwined with impacts to recreation. Many of the letter-writing organizations were recreationalist groups. Their comments highlight the negative impacts to the experience of hikers and campers, both from temporary construction activities and permanent landscape changes. One specific concern was the flooding of trails and campsites as a result of the Eightmile Lake Storage Restoration project. Damage to scenic values was also mentioned in seven letters. Among the many superlatives, the

letters refer to the ALWA as “one of the state’s most iconic landscapes” (DPEIS Comment Letter 380) and “renowned for its rugged beauty” (DPEIS Comment Letter 381). These organizations expressed concern about the visual impacts to the ALWA from enlarged dams, the proposed tunneling under Alternative 5, and late-season late drawdowns.

Finally, seven letters mention the potential impact of the Icicle Strategy on the ecological functions of the ALWA. These organizations noted the importance of wilderness for conserving biodiversity and providing clean water to the subbasin. Some organizations felt that wilderness ecosystems were shortsightedly being sacrificed for downstream benefits. A specific concern was that the Alpine Lakes Optimization, Modernization and Automation project would harm riparian and aquatic ecosystems by altering stream flows. There was also concern that the drawdown of lakes to provide late season supply downstream would reduce the amount of water available for the wilderness ecosystems.

In their responses, the co-leads recognized the strong support for the protection of ALWA. The co-leads referred commenting organizations to Section 4 of the FPEIS, which analyzes the impacts to wilderness, recreation, and aesthetics for each alternative. Some information, such as number of helicopter flights, was added to the FPEIS. The co-leads repeatedly assured commenting organizations that further review of impacts to the ALWA would occur during project-level planning when more details were available.

Responding to concerns about specific impacts, the co-leads noted that the proposed projects would not affect the Pacific Crest Trail or Enchantment Basin, two of the most beloved sections of the ALWA. Additional recreation impacts would be low; none of the projects in the Preferred Alternative would flood the campsite or trails and construction should not last long.

Some wilderness impacts, such as helicopter flights, were expected to decrease in the long run as a result of the improvements. Regarding ecological concerns, the co-leads reiterated that the streams and lakes in ALWA are affected by the existing dams, so natural conditions do not currently exist. Drawdowns already occur for each lake and the proposed projects were expected to benefit riparian and aquatic ecosystems with no adverse impacts. Finally, Alternative 4, which would have caused the most drastic wilderness impacts with tunneling and lake enlargement, was not selected as the Preferred Alternative.

Concerns about national wilderness system

Along with concern for the local impacts, there was also concern for the broader impacts that the Icicle Strategy could have nationally. During scoping, several commenting organizations felt it was important to protect the ALWA as part of a wilderness system that belonged to all citizens (Scoping Comments 24 & 32). These sentiments became more prominent in the DPEIS comment letters (see Table 5.6). The greatest concern was that the development of infrastructure within the ALWA could undermine the Wilderness Act, threatening protections for the entire federal wilderness system. This sentiment is best summarized in the letter from the Pacific Crest Trail Association: “Opening up a beloved wilderness area for any development puts the entire wilderness preservation system in a compromised position.” (DPEIS Comment Letter 19). The predominant concern was that the modification of dams in the ALWA would set a precedent for future intrusions into wilderness areas. Six of the letters specifically characterized the infrastructure projects as “unprecedented” in federal wilderness.

Table 5.6: Concerns about national wilderness system in DPEIS comment letters		
Concern	**Letters**	**Co-Lead Response**
Damage to federal wilderness system	**7**	**Noted and accepted**: All projects will comply with wilderness law
Neglects national stakeholders	**4**	**Noted but not specifically addressed**

Several external organizations also felt that national stakeholders were being neglected in the Icicle Strategy planning process. Their comment letters noted that the ALWA and other federal lands belong to all Americans equally. The wide range of the commenting organizations illustrates these broader concerns; the Olympic Park Associates, for example, had no local interest in the ALWA itself but wrote out of a general support for protecting the wilderness system.

In their response to these national-level concerns, the co-leads noted the strong support for public lands and wilderness. They reasserted that all proposed projects in the ALWA appeared to be legal based on programmatic-level assessment. The co-leads also assured external organizations that they would coordinate with the US Forest Service during project-level review to ensure that every action complied with federal regulations. While these responses attempted to reassure the commenting organizations that national wilderness interests would be protected, it is unclear if they successfully addressed the perceived threat of a damaging precedent.

Chapter 6. Discussion & Conclusions

Limitations

Before delving into a discussion of the results, it is important to acknowledge the limitations to these findings. First, as a single case study, any generalization of these results beyond the basin is inherently limited. There are also limitations inherent to the nature of the source material. The SEPA comment letters were crafted as strategic messages to influence agency decision-making. Thus, their focus on certain themes was shaped by the nature of the review process and by a specific political strategy. For example, the DPEIS comment letters may focus on certain positions or procedural complaints simply because they believe that those positions or concerns have the highest likelihood of influencing the process. This limits the ability to truly infer whether the themes from the letters reflect the true interests and greatest concerns of the commenting organizations. Since the letters present a static perspective from one point in the process, they also cannot fully capture the evolving perspectives over time.

Additionally, it is difficult to parse how much the responses of the co-leads to these letters represent the influence of the IWG in the collaborative process. In essence, there are two parallel and simultaneous processes: a collaborative planning effort alongside a bureaucratic review process. It is beyond the scope of this study to determine the extent to which the actions of the co-leads were on the behalf of the IWG or were undertaken as part of their agency responsibilities. Further insights into the co-leads' dual role would require first-hand knowledge of the involvement of the IWG in the SEPA process. Ultimately, these limitations should be taken into consideration when assessing whether the conclusions pertain more closely to collaborative planning or the environmental review process itself. Yet, the mixed agency roles seen in the Icicle Creek case

study are not rare. In Washington and most other states, environmental impact assessment is an essential component of virtually any natural resource plan, so similar forms of agency involvement and public comment are common in collaborative watershed planning. While the co-leads may not have spoken for the entire IWG or made unilateral decisions on its behalf, they did represent the IWG in their preparation of the DPEIS and their management of the SEPA process.

Finally, without having been present in the IWG process from the start, it is difficult to determine how much external stakeholder organizations had influenced the planning efforts prior to the SEPA process. From the DPEIS comment letters, it is clear that outside groups had publicly communicated concerns about the wilderness-based projects to the IWG since the start of planning. As the comment letters only briefly mention these previous warnings, it is impossible to determine their exact effect on IWG deliberations. From the content of the comments, however, it is clear that the authors of those letters felt that their main criticisms had not been heeded by the IWG during the public input process prior to SEPA.

Discussion

The persistence of themes from scoping through the DPEIS comment period suggests that the IWG and co-leads were not able to effectively address the concerns of the external stakeholder groups. Furthermore, the co-leads made no substantive changes to the Preferred Alternative or any modification to wilderness-based projects in the FPEIS. The co-leads did learn lessons from the controversial Yakima SEPA process by considering a broader set of six alternatives. However, by identifying the Base Package as the Preferred Alternative from scoping onwards, the agencies undermined the perception of an open process to external stakeholders. While the co-leads may

have diligently conducted the SEPA process, few concessions were made to outside groups other than the inclusion of several conservation measures and the addition of details to the FPEIS. Ultimately, it seems unlikely that these efforts will resolve the concerns expressed by those in strong opposition to the wilderness-based projects within the Icicle Strategy.

The results of this study illustrate conflicting perceptions of the collaborative planning process between external stakeholder groups and the lead agencies. The comment process reveals a fundamental disagreement on key facts, which made it difficult to reach any common understanding. For example, the comment letters and co-lead responses express two conflicting legal opinions on the project proposals. While the co-leads laid out the reasons that they believed the wilderness-based projects would be legal, external stakeholders remained steadfast in their interpretation that the Wilderness Act forbids such exceptions. Similarly, co-leads felt that leaving detailed review to project-level planning was appropriate and normal under SEPA regulations; external stakeholder groups fundamentally disagreed and saw this as either a delaying tactic or willful negligence. This difference in perception between outside groups and the co-leads on the basic facts of the situation made resolving their differences exceeding difficult. Though the co-leads explained and justified their decisions from their own perspective, the fundamental understandings of the SEPA process remained at odds.

Taken as a whole, the IWG narrative and the external stakeholder organizations paint two different yet persuasive interpretations of the same events. From the co-lead and IWG perspective, the SEPA process had successfully incorporated outside input. The co-leads had followed SEPA diligently, considered numerous alternatives, clearly explained their reasoning, and ultimately selected the Preferred Alternative that best met the objectives at lowest environmental impact. To

their view the process had been fair and open. Outside organizations had been invited to join the IWG and the co-leads view was that the choice not to participate did not invalidate the legitimacy of the collaborative process. From the perspective of external stakeholder organizations, the Icicle Strategy appeared to be a predetermined decision that catered to a small cadre of local interests. These outside organizations felt that the co-leads and IWG had failed to seriously consider alternatives to a flawed plan. Whereas the co-leads assured them that project-level review would further evaluate the proposals, concerned stakeholders interpreted programmatic review as a means to delay their legitimate concerns until it was too late to reconsider project selection.

Ultimately, perceptions and interpretations aside, it is clear that the IWG remained committed to its own internal goals despite strong external opposition. By adhering to the principle that the entire package plan should move forward as a whole, the IWG limited its reconsideration of controversial projects. The preference for the original Base Package throughout the planning process indicates that the IWG itself maintained a strong collaborative vision, though this may have handicapped its ability to incorporate outside concerns.

It seems unlikely that the Icicle Strategy will avoid conflict with outside stakeholders in the near future. Due to concerns about precedent for the Wilderness Act, it seems likely that external groups will strongly oppose the Eightmile Lake Storage Restoration in project-level review and challenge the plan in court. This intent was explicit in DPEIS Comment Letter 381, which specifically threatened litigation over any projects in federal wilderness. Regardless of the legal merits of such a case, the prospect of prolonged lawsuits may undermine the benefits of the collaborative planning effort. Since the IWG has deemed the Eightmile Lake Storage Restoration as crucial to meeting the Guiding Principle, it seems likely that a legal battle may be on the horizon.

Conclusions

The Icicle Creek Subbasin case study suggests several takeaways about how collaborative partnerships can engage more effectively with outside groups who threaten derailment. Here are some conclusions that both agencies and external stakeholders should consider in future collaborative efforts:

Environmental Impact Assessment is a limited platform for public input

The Icicle Strategy reveals the limits of the EIA model for redirecting decision-making based on public feedback. This matches the findings of previous studies (Richardson 2005; Rozema & Bond 2015). In a review of multiple case studies, Rozema and Bond (2015) examined the types of public discourses that EIA process can accommodate during project development. They found that assessments produced through the EIA review process do not provide an effective tool for opposing projects or fundamentally redirecting planning efforts. Such influence goes beyond the intended purpose of EIA as a platform for considering environmental impacts. While EIAs do provide an effective vehicle for considering impacts, alternatives, and mitigation measures, they cannot accommodate direct challenges to the purpose of the project or the plan as a whole. Thus, groups who fundamentally disagree with the objectives of a proposal, like those who opposed to the Icicle Strategy, should not expect their comments to radically move decision-making unless they choose to participate earlier in the process.

Mixing agency roles in collaborative partnerships can create a perceived conflict of interest

From the Icicle Creek experience, it is clear that perception is critical to establishing legitimacy in the process. From the scoping comments and DPEIS comment letters, there was a lasting perception by external stakeholders that Chelan County and the Department of Ecology were compromised in their dual role as IWG members and SEPA lead agencies. These external stakeholder groups saw the co-leads' primary objective of fulfilling the IWG's Guiding Principles as fundamentally incompatible with their public responsibility to conduct an impartial SEPA process. Their selection of the IWG's original Base Package as the Preferred Alternative in the DPEIS further undermined trust in the process or faith that the IWG would give the alternative plans a fair consideration. These results match previous studies which found that agencies involved in collaborative processes can struggle balancing roles (Ryan 1999; Wondolleck & Ryan 2001). Due to the difficulty of representing multiple interests and managing public perception, both Ryan (1999) and Wondolleck & Ryan (2001) recommend that participating agencies avoid acting as facilitators in collaborative processes. Following the Icicle Creek Subbasin experience, future partnerships should consider using an outside agency to lead the environmental review in order to avoid this perceived conflict of interest and maintain faith in the public input process.

Raising scales may bring benefits to broader interests

The opposition of wilderness organizations to the Icicle Strategy reveals the difficulty that watershed planning faces when local needs conflict with regional and national interests. For the external stakeholder groups, the scale of place-based plans caused two major issues: 1) as a watershed plan, the Icicle Strategy provided no direct benefits to wilderness interests and 2) the

project raised strong concerns that unprecedented projects in one basin could irreversibly harm the entire wilderness system. For these interest groups, any local benefits would come at the cost of a much greater national good. This perceived incongruence of costs and benefits seems inevitable as long as planning remains at the local watershed level.

To entice national stakeholder groups to participate productively in place-based planning processes, it may be helpful to link plans to shared benefits beyond the basin (Sadoff & Grey 2002). This may be beyond the scope of partnerships like the IWG, but there are numerous state and federal agencies invested in the success of collaborative planning that can exercise authority outside the basin. If the Washington State Department of Ecology could offer broader benefits to wilderness and recreational groups in other parts of the state, they may avoid running into outside opposition on every watershed planning effort. Margerum (2007) has suggested that decoupling collaboration from an exclusively local level and creating nested institutions may improve coordination and natural resource outcomes. This may take extra time to build agency trust and new legal frameworks, but ultimately, moving beyond the basin may paradoxically help avoid local-level conflicts.

Are basins with wilderness areas suited for place-based collaboration?

Finally, it is worth reconsidering whether basins with extensive federal wilderness are suitable locations for place-based collaboration in general. If the issues and dynamics observed in the Icicle Creek Subbasin are any indication, wilderness areas may in effect function as hegemons in a basin, with the unilateral ability to derail a collaborative plan. Since national wilderness groups are well-funded and prepared for litigation, the outside threat alone could dissuade the time

investment and implementation ability critical for place-based collaboration. McMurtrey (2018) observed a similar issue in basins with dams managed by federal agencies, where the looming presence of national stakeholder in every decision delayed, and eventually hamstrung local collaboration. Ultimately, it may be the case that basins that include key federal entities such as important wilderness areas or federal dam projects are unlikely to be successful in negotiating and implementing projects through place-based partnerships, at least until there is broader trust in federal agencies' commitment to environmental values.

Future Directions

The results of this study suggest that more research is needed into how place-based collaborative partnerships can effectively engage with external stakeholder groups. While there may be no "best practice" for place-based partnerships, more research could expand both the literature and collective experience on how processes can handle single-interest stakeholders and organizations who seek to influence collaborative watershed planning as outsiders.

The Icicle Creek Subbasin itself could also provide a fruitful watershed for further research into the relationship between place-based collaboration and external stakeholders. With more time and resources, future studies could supplement this document-based study with mixed method analysis. Interviews with leaders of the external stakeholder organizations could explore their feelings about the planning process more deeply, better evaluate their satisfaction (or lack of satisfaction) with the outcome, and investigate how these external stakeholders felt the public input process could have been managed more effectively. Similarly, it would be useful to interview representatives from the co-lead agencies, Washington State Department of Ecology and Chelan

County, to understand how they balanced their roles as both workgroup members and organizers of the public review process. Such first-hand knowledge could illuminate the limitations and challenges of incorporating public input into place-based collaboration.

In addition, it would be helpful to investigate place-based collaboration in similar basins to see how different variables affect the process and outcome. For example, have other collaborative partnerships proposed infrastructure modifications in wilderness areas to improve water resources? As discussed, the Alpine Lakes Wilderness Area is an especially beloved and accessible natural area relatively close to urban centers; are the concerns different when projects involve less visited, less famous wilderness areas? Comparing different basins could help contextualize this case within a more extensive examination of the relationship between collaborative water management and federal lands.

With climate change stressing water resources around the Western U.S., difficult governance decisions lie ahead. Many basins will face dilemmas on how to balance large-scale ecosystem management with local control and how to prioritize the competing environmental values of endangered species conservation and wilderness preservation. As place-based partnerships learn to better handle external concerns, they will only become more effective at deliberating these tough decisions.

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APPENDICIES

Appendix A: List of Acronyms and Abbreviations

Acronyms

- ALWA: Alpine Lakes Wilderness Area
- cfs: cubic feet per second
- COIC: Cascade Orchard Irrigation Company
- DPEIS: Draft Programmatic Environmental Impact Statement
- EIA: Environmental Impact Assessment
- FPEIS: Final Programmatic Environmental Impact Statement
- IPID: Icicle and Peshatin Irrigation District
- IWG: Icicle Work Group
- LNFH: Leavenworth National Fish Hatchery
- NEPA: National Environmental Policy Act
- PEIS: Programmatic Environmental Impact Statement
- SEPA: State Environmental Policy Act
- USFS: United States Forest Service
- USFWS: United State Fish and Wildlife Service

Abbreviations

- Ecology: Washington State Department of Ecology
- Chelan County: Chelan County Natural Resource Department
- Co-conveners: Chelan County & Ecology (in IWG role)
- Co-leads: Chelan County & Ecology (in SEPA role)

Appendix B: Additional Information on the Icicle Strategy

Table B: IWG Guiding Principles (Final Version in FPEIS)		
Guiding Principle		**Description**
1	**Improve Instream Flow**	• Enhance fish habitat/usage • Promote healthy habitats • Enhance channel-forming functions • Meet aesthetics and water quality objectives • Build resilience to climate change
2	**Improve Sustainability of LNFH**	• Meet legally-mandated fish production requirements • Maintain diverse source availability to protect fish health • Improve infrastructure to enhance water quality, fish passage, & resource efficiency
3	**Protect Treaty/ Non-treaty Harvest**	• Meet all federally protected fishing and fish harvesting rights in basin, regardless of drought conditions or season • Improve catch per unit effort • Maintain multispecies harvest opportunities • Create tribal impact assessment and management plan
4	**Improve Domestic Supply**	• Meet supply for projected population growth through 2050 • Improve domestic reliability for rural well-users
5	**Improve Agricultural Reliability**	• Ensure that interruptible users have secure supply in average water years • Decrease risk of drought impacts • Improve delivery and irrigation efficiency • Repair IPID dam infrastructure
6	**Enhance Icicle Creek Habitat**	• Invest in habitat restoration/improvement projects • Improve fish passage in Icicle Creek • Offset project-related impacts with land acquisitions & easements
7	**Comply with State and Federal Law, and Wilderness Acts**	• Engage regulators in planning process • Complete all required permitting & environmental review • Appropriately screen all diversions

Wilderness-Based Projects in the IWG Base Package

There are two projects from the base package that involve modifying infrastructure in the Alpine Lakes Wilderness Area: 1) Alpine Lakes Optimization, Modernization, and Automation and 2) Eightmile Lake Storage Restoration.

Alpine Lakes Optimization, Modernization, and Automation

This project would upgrade the infrastructure and modify the operations of the seven existing dams in the ALWA. All seven dams were built in the first half of the twentieth century to enhance the capacity of natural lakes and store late summer water supplies. The IPID manages four of the lakes (Klonaqua, Square, Eightmile, and Colchuck) to provide late summer irrigation supply in drought years. These remote dams release water through manual controls, which can only be accessed by hiking or helicopter. Square Lake, for example, requires a 13-mile one-way hike, while Klonaqua, the second longest, is located 10 miles from the nearest road (Dept. of Ecology & Chelan County 2019). In normal years, the IPID draws down one lake for routine maintenance. In drought years, some or all lakes may be drawn down to meet irrigation demand. During drawdowns, IPID employees manually open the release valve in July or August and then return in September or October to close the outlet for the following season. The difficult access and lack of precision in releases hampers the ability for adaptive management.

The US Fish and Wildlife Service (USFWS) manages the other three alpine lakes (Upper Snow, Lower Snow, and Nada) in order to supply instream flow requirements for LNFH operations. These dams operate similarly to those of the IPID. Releases are manually controlled

and cannot be easily adjusted for adaptive management. Typically, valves are opened in summer to match hatchery demand and then closed later in the fall.

According to the FPEIS, the Alpine Lakes Optimization, Modernization, and Automation would "allow for more frequent, optimized releases from lakes than historical operations" (Dept. of Ecology & Chelan County 2019, Ch. 2, p. 55). With automated control gates, lake levels could be adjusted instantly in response to basin conditions. Replacing the manual controls would give the IPID and USFWS greater accuracy in releasing irrigation supplies and meeting target flows for Icicle Creek. Even in non-drought years, all pools could be drawn down to minimum levels to create additional instream benefits without compromising the recharge ability for the following year. In normal years, the upgrades are projected to add 30 cfs of instream flow during the summer months and 5,465 acre-ft of annual benefit (Dept. of Ecology & Chelan County 2019, Ch. 2, p. 51).

Eightmile Lake Storage Restoration

This project would repair deteriorated dam infrastructure at Eightmile Lake, restoring the reservoir's original storage capacity. Constructed by the IPID in the 1920s, the Eightmile Lake dam mainly consists of an earth and rock embankment that has eroded almost four feet from its original height. This deterioration has reduced the lake's storage capacity by 900 acre-ft, from its legally permitted 2,500 acre-ft to 1,600 acre-ft (FPEIS, Ch. 2, p. 74). Damage to the outlet gate and the partial collapse of the low-level outlet pipe have also reduced the release capacity and made operations challenging. Furthermore, there is an increasing risk of failure due to erosion, which could threaten approximately 200 people living downstream on Icicle Creek (Dept. of

Ecology & Chelan County 2019, Ch. 2, Pg. 74). The Eightmile Lake Storage Restoration would rebuild the dam to its original capacity and replace the outlet pipe and controls, allowing drawdown below current levels. These modifications could help increase late summer instream flows in Icicle Creek.

Appendix C: Codebook

Positions: These themes articulate specific positions on how the Icicle Strategy should move forward. As positions, they oppose or support for elements within the DPEIS and advocate specific actions. These positions may include preferences on which alternative is selected, requests for projects to be removed, or demands for how the SEPA review process should proceed.

A. Withdraw, revise, & re-release: DPEIS should be withdrawn, revised and resubmitted for public review. In its current form, the draft is too flawed to move on to a final version without significant modification and further public consultation. Comment may or may not give a specific reason (illegal projects, incomplete information, lack of reasonable alternatives). This theme includes the phrasing that DPEIS should be revised, be withdrawn, or is not ready for final review.

> Example: "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" (Letter 12).

B. Oppose projects within ALWA: States general opposition to infrastructure projects within the ALWA. This may include removing projects that sacrifice wilderness or enlarge the Alpine Lakes. This theme does not apply if there is an explicit position towards specific projects, such as Opposition to Eightmile Restoration (Theme C) or Opposition to Alternative 4 storage enhancement projects (Theme D).

> Example: "Chelan County and Ecology should revise and rerelease the PEIS to remove these projects and provide alternatives that don't sacrifice the experience of hikers for more water and new dams in this treasured alpine valley" (Letter 383).

C. Oppose Eightmile Restoration: Specifically opposes the Eightmile Lake Storage Restoration project, which is included in all DPEIS alternatives. This includes the position that the Eightmile Lake dam should remain at its current elevation and not any higher.

> Example: "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" (Letter 12).

C.1. Litigation threat: Specifically threatens the Icicle Strategy planning effort with a lawsuit if Eightmile Lake Storage Restoration is included in adopted plan.

> Example: "The wilderness protection community has repeatedly told the draft EIS authors that there will be litigation to enjoin any effort to make the dam higher. Litigation takes time and money on both sides" (Letter 381).

D. Oppose Alternative 4: Explicit or implied opposition to Alternative 4, which calls for expanding water storage in the ALWA. May include explicit or implied opposition to any of the three storage enhancement projects unique to Alternative 4: Eightmile Lake Storage Enhancement, Upper Klonaqua Lake Storage Enhancement, & Upper and Lower Snow Lake Storage Enhancement. This theme may also include opposition to tunneling between lakes, which refers to Upper and Lower Snow Lake Storage Enhancement project.

> Example: "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." (Letter 12).

E. Support Alternative 5: Stated or implied support for Alternative 5, which uniquely includes the Full IPID Pump Exchange project and moves IPID's point of diversion. This theme can include partial support of Alternative 5 (in favor of moving IPID point of diversion but not other elements of the alternative).

> Example: "Alternative 5 is best. It 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 without building bigger dams in the Wilderness, especially in future decades when climate change will reduce flows in the Icicle watershed" (Letter 379).

F. Conservation first: Holds position that significant conservation must occur in the subbasin before any new storage projects are considered. May propose specific conservation measures that should be implemented (i.e.: removing LNFH, reducing demand, improving municipal infrastructure).

> Example: "Before we, everywhere, use short term methods to increase water availability, we must conserve the water we take" (Letter 18).

IWG Concerns: This group of themes centers on criticisms of the Icicle Work Group, its collaborative process, and its role in guiding the Icicle Strategy.

G. IWG not representative: Asserts or implies that the IWG does not adequately represent all stakeholders in the Icicle Creek Subbasin. May characterize the IWG as "handpicked", "non-representative", or "self-selected" small group. May also include statements that the IWG does not have broad based support.

> Example: "Instead, the DPEIS, considered only an "Icicle Political Bargain" obtained from a small group of Ecology-OCR and Chelan County handpicked organizations engaged in political tradeoffs in the Icicle Basin" (Letter 22).

G.1. Lack of environmental groups: Specifically criticizes the lack of representation by environmental groups within the IWG.

> Example: "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" (Letter 12).

G.2. Eastside/westside dynamics: Expresses sentiment that the IWG unfairly favors eastside (local) interests over westside (Seattle-area) interests when considering projects in wilderness.

> Example: "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 [...] IWG refusal to treat westside owners of these public lands the same as eastside owners of these public lands, or for other reasons" (Letter 12).

H. Issues with process: Criticizes the organization, operating procedures, or groups norms of the IWG collaborative process. Criticism may include internal group dynamics, incorporation of outside feedback, or scope of planning efforts.

> Example: "Instead, the DPEIS, considered only an 'Icicle Political Bargain' obtained from a small group of Ecology-OCR and Chelan County handpicked organizations engaged in political tradeoffs in the Icicle Basin" (Letter 22).

H.1. Inflexibility: Criticizes the IWG's inflexibility in developing the Icicle Strategy. May specifically point to the IWG's unwillingness to make adjustments to the plan, reconsider wilderness-based projects, or deviate from its preferred proposal.

> Example: "In the five years since the Department of Ecology ('Ecology') convened the IWG to address a variety of regional issues, including improving instream flows and increasing water supply for irrigation and municipal use, the IWG has focused on replacing, modernizing, and expanding several deteriorated, earthen dams on remote lakes in the Alpine Lakes Wilderness as its preferred solution, to the exclusion of all other alternatives." (Letter 20).

H.2. Not receptive to outside concerns: Criticizes the IWG's lack of receptiveness to concerns raised by public or outside stakeholder groups throughout the planning process.

> Example: "Despite the repeated and emphatic concerns voiced by The Wilderness Society and others in the conservation community about that solution, the IWG has not meaningfully considered whether that solution is consistent with and supported by applicable state and federal law." (Letter 20).

H.3. Restrictions on dissent: Criticizes the IWG operating procedure that prohibits members from publicly dissenting and criticizing the IWG efforts.

> Example: "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 [...] IWG's prohibition on public criticism [...]" (Letter 12).

I. Flawed Guiding Principles: Argues or suggests that the Guiding Principles lack legitimacy, due to weak collaborative process and poor representativeness. May include characterizations of the Guiding Principles as self-serving, poorly motivated, or improper political tradeoffs. Also may include use of ironic quotation marks around Guiding Principles to imply disagreement.

> Example: "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" (Letter 12).

DPEIS/SEPA Concerns: These themes identify deficiencies in the DPEIS or SEPA process that have made the planning process inadequate. Such themes may include substantive concerns about the content of the DPEIS or procedural concerns about how the co-leads have conducted the SEPA review.

J. Inadequate information: The information provided in the DPEIS is incomplete, inaccurate, or insufficient. May include criticism about the overall level of detail or specifically identify missing or inaccurate information.

> Example: "As a general matter, the legal deficiencies identified in this letter require that the DPEIS be revised and re-issued. Although there is a wealth of information in the DPEIS, its significant ambiguities and inadequate or nonexistent analysis of critical issues call into question whether the DPEIS is sufficient to meaningfully guide the government decision-making process and facilitate public engagement" (Letter 20).

J.1. Not enough legal analysis: Argues that the DPEIS does not contain sufficient discussion of key legal issues. These deficiencies may include lack of discussion of federal wilderness protections, water rights, or the integration of the NEPA process.

> Example: "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" (Letter 12).

J.2. Must acknowledge USFS authority: Argues that the DPEIS should acknowledge or more strongly emphasize the USFS's authority over the ALWA and its role in protecting wilderness. This may include the USFS's power over permitting decisions within the ALWA and its responsibility to conduct NEPA review over such decisions.

> Example: "The DPEIS should acknowledge the land management role and authority of the U.S. Forest Service on national forest lands, its special responsibilities to protect the wilderness character of the Alpine Lakes Wilderness, and the application of numerous federal laws to many of the actions proposed in the Icicle Strategy" (Letter 14).

J.3. Inaccurate costs: Argues that the DPEIS inaccurately estimates the cost of projects by failing to account for extra costs related to wilderness complications.

> Example: "For new storage, 'restoration' storage and 'optimization' projects, the timelines and estimated costs stated in the DPEIS are highly suspect, because the DPEIS fails to account for the fact that these lakes are on National Forest lands inside the Alpine Lakes Wilderness" (Letter 379).

J.4. Missing emergency work on Eightmile: Argues that DPEIS should include more information on the emergency work done to repair the Eightmile Lake dam in 2018.

> Example: "Finally, if the lead agencies wish to consider emergency work at Eightmile Lake, that action must be identified and analyzed in the DPEIS, not just in the final PEIS" (Letter 20).

K. Phased Review is inappropriate: Expresses concern about the phasing of the SEPA process between programmatic and project-level review. May include claims that important details should not be left to project-level review, that enough information is currently available to make a determination of impacts, or that programmatic review should fully analyze project-level impacts before leading to a decision.

> Example: "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" (Letter 12).

K.1. Deferred to project-level planning: Argues that the DPEIS improperly defers (or "punts") the consideration of importance issues to project-level review. This may include the claims that project-specific information should influence programmatic decision-making or that phased review will lead to a piecemeal analysis.

> Example: "In summary, the DPEIS identifies but does not analyze important legal constraints that impact the range of alternatives that should be considered. That analysis

should be done at the programmatic level. It cannot be punted to the project-level after determinative scoping decisions have already been made" (Letter 20).

K.2. Misses cumulative effects: Argues that phased review has caused an incomplete analysis of cumulative impacts in the DPEIS.

Example: "The conclusory and limited discussion of cumulative impacts in the DPEIS underscores the importance of meaningfully evaluating the project-level impacts now" (Letter 20).

L. Not a reasonable range of alternatives: Asserts that the DPEIS has not provided a reasonable and adequate range of alternatives, as required by SEPA. These comments may criticize the alternatives for not being fully developed, for not being distinct enough, for including "unfeasible" projects, or for not considering alternatives that may cause less environmental impacts.

Example: "The DPEIS also fails to appropriately select and analyze alternatives for the Icicle Strategy" (Letter 20).

L.1. All alternatives include ALWA projects: Argues that the range of alternatives is inadequate since all alternatives include projects within the ALWA. This may include the argument that the DPEIS does not meet the SEPA requirement for analysis of offsite alternatives. It may also include the argument that the DPEIS should consider the possibility that projects within the ALWA may not be legal, a scenario which would make all the proposed alternatives unfeasible.

Example: "Because all of the alternatives involve construction in the wilderness, they do not represent "a reasonable range of alternatives," as required by the Weyerhauser decision" (Letter 12).

L.2. Include more conservation: Argues that the alternatives should contain more conservation measures or that the DPEIS should include an alternative package specifically focused on aggressive conservation. This may include increasing domestic conservation or removing Leavenworth National Fish Hatchery.

Example: "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" (Letter 12).

L.3. Alternatives are too vague/unclear: Argues that the alternatives in the DPEIS are presented in incomplete detail or are too difficult to distinguish and differentiate.

Example: "Third, the proposed alternatives are inadequately and amorphously described, which makes it almost impossible to comment on them, much less identify a preferred alternative. The DPEIS presents each alternative as a "package" of projects, but fails to identify the complete slate of projects each alternative will include" (Letter 20).

L.4. Include true "No Action" alternative: Argues that the DPEIS does not provide a proper No Action Alternative. May assert that the No Action Alternative does not act as a proper benchmark, is too similar to the other alternatives, or contains too many assumptions and hypotheticals.

> Example: "Instead, the no-action alternative should include only those actions that are foreseeable with current zoning and approvals, not hypothetical actions which require extensive study, permitting, and approvals to move forward and are the subject of the government action being evaluated" (Letter 20).

L.5. Include alternative with dam removals: Argues that DPEIS should include an alternative that considers removing the existing dams within the ALWA.

> Example: "First, the DPEIS improperly limits the range of alternatives because it declines to consider any alternatives which include decommissioning or removing the dams" (Letter 20).

M. Not enough mitigation: Concern that the DPEIS lacks mitigation measures for adverse impacts or does not address mitigation strategies in sufficient detail.

> Example: "The DPEIS's discussion of proposed mitigation measures is insufficient and incomplete" (Letter 20).

N. Issues with SEPA Process: Concern that the co-leads failed to follow SEPA guidelines appropriately during the scoping and drafting of the PEIS. This could include the general belief that the planning process violated SEPA protocol or specific concerns about transparency, public engagement, or scoping responsiveness.

> Example: "This is not the SEPA process. The SEPA process is designed to provide information on potential significant adverse impacts of proposals to decisionmakers" (Letter 22).

N.1. Did not take scoping concerns seriously: Argues that co-leads did not adequately address key concerns brought up during scoping, did not present enough information during scoping, or did not follow through with commitments made during scoping.

> Example: "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" (Letter 12).

N.2. No real chance for public debate: Argues that the SEPA process did not provide a meaningful opportunity for public involvement. This may include the belief that the DPEIS served to justify an already made decision without real public consideration. It may also include the criticism that lack of information or transparency precluded meaningful public involvement.

> Example: "In its current form, the DPEIS is suitable to serve only as an improper 'ex post facto justification' for government action, depriving the public of a meaningful opportunity to comment on and improve the important government decisions at issue" (Letter 20).

N.3. Only considered Preferred Alternative: Argues that co-leads and IWG never seriously considered alternatives to the original base package and remained overcommitted to their Preferred Alternative.

> Example: "In this DPEIS, Ecology-OCR (and Chelan County) considers the decision (to proceed with the single Icicle Political Bargain) to have already been made" (Letter 22)

N.4. SEPA should not follow IWG GPs: Concern that the SEPA planning process focused too much on meeting the IWG Guiding Principles rather than exploring legitimate, less harmful alternatives. Argues that co-leads should focus more on following SEPA and less on meeting the IWG's objectives.

> Example: "Again, SEPA does not recognize 'guiding principles' set by an 'Icicle Political Bargain,' as a reason to reject an alternative from SEPA review" (Letter 22).

Legal Concerns: These themes express doubt about the legality of the Icicle Strategy's proposed projects within the ALWA wilderness. The degree of concern may vary: some comments assert that certain projects are illegal, some express uncertainty about their legality, and some reaffirm that the co-leads must be careful to comply with specific laws.

O. Illegal under federal wilderness laws: Concern that infrastructure projects within the ALWA violate or may violate federal wilderness law. This includes the legal claim that the IPID easements to operate dams do not supersede federal wilderness protections.

> Example: "First, the IWG has assumed without question that the District's easements with the Forest Service supersede and render irrelevant federal wilderness protections. That assumption is wrong. Federal wilderness protection must be considered" (Letter 20).

O.1 Wilderness Act of 1964: Concern that projects violate or may violate the Wilderness Act of 1964, specifically Section C, which prohibits the use of mechanical equipment, roads, and air transport in federal wilderness. This includes the belief that the IPID easements do not supersede or create an exception to the Wilderness Act.

> Example: "The activities at the heart of the Icicle Strategy—expanding and modernizing water infrastructure, using mechanized equipment and transport, and possibly building a road—are 'strong[ly] prohibit[ed]' by the Wilderness Act" (Letter 20).

O.2. ALWA management laws: Concern that the wilderness projects violate or may violate the USFS's management rules for the ALWA: the Alpine Lakes Area Management Act of 1976 and the Alpine Lakes Wilderness Management Plan.

> Example: "This is consistent with the Forest Service's management plan for the Alpine Lakes the existence of several 'unimposing,' 'substantially unnoticeable' dams Wilderness (the 'Plan'), which was adopted before the easements were granted. Although the Plan mentions 'constructed primarily of native materials,' it states that those structures 'will not be expanded' and must 'continue to be maintained by primitive means unless an environmental analysis indicates that the work cannot be accomplished without motorized equipment'" (Letter 20).

P. Illegal under state water law: Concern that IPID may not have the legal rights to implement the Eightmile Lake Storage Restoration project or the storage enhancement projects from Alternative 4. This includes the legal opinion that IPID relinquished or forfeited part of their original storage rights in Eightmile Lake. The comment may argue that Ecology should perform an 'extent and validity determination' to certify IPID's water rights before considering the proposed alternatives.

> Example: "The irrigation district has forfeited, relinquished, or never acquired the right to store or release more water from the lakes identified in the DPEIS than it has historically stored or released. The irrigation district never held or no longer holds the right to store or use the additional quantities of water envisioned by the various alternatives" (Letter 14).

Q. Requires NEPA review: These comments express concern that planning process has been moving forward without appropriately considering National Environmental Policy Act (NEPA) review. Comments may include statement that NEPA must be conducted on all federally permitted projects, that the alternatives ignore NEPA requirements, or that certain projects may not pass NEPA review.

> Example: "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" (Letter 12).

ALWA: These themes raise concerns about the potential impact of the Icicle Strategy on the Alpine Lakes Wilderness Area. These themes describe support for specific wilderness values and uses as well as perceived threats from proposed projects.

R. Attachment to place: Mentions a specific connection to the ALWA as a source of concern for the Icicle Strategy. May include the organization's and/or its members' vested interest in protecting the wilderness area or connection to a particular section of the ALWA, such as the Enchantments or Pacific Crest Trail.

Example: "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" (Letter 12).

S. Wilderness values: Expresses concern for potential impacts of the Icicle Strategy to the wilderness character of the ALWA. This may include a general reference to wilderness character, wilderness values, or preservation. It may also include concern for specific threats into the ALWA's primitive nature, such as the introduction of mechanized equipment or aircraft.

Example: "Congress has designated 765 wilderness areas partly to ensure that they remain untrammeled, so generations can visit and experience them. For the thousands of Pacific Crest Trail Association members and volunteers who give their time and money to maintain and protect the trail, publicly owned wilderness areas are a great inherited treasure that should not be disturbed" (Letter 19).

S.1. Don't sacrifice wilderness for flows: Opposes the sacrifice of wilderness areas to create downstream benefits. May include concerns that current proposals unfairly exploit one resource (wilderness) to enhance another (water supply) or sacrifice upstream areas (ALWA) to benefit downstream habitat.

Example: "As proposed, the Icicle Strategy threatens to exploit one resource (i.e., the wilderness and the water it provides) under the guise of protecting another (i.e., water in Icicle Creek). This is simply wrong" (Letter 382).

***S.2. Mechanized equipment*:** Expresses concern at the mechanization of dam infrastructure or the use of mechanized equipment, including excavators, for construction within ALWA.

Example: "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" (Letter 12).

***S.3. Helicopter flights*:** Mentions wilderness concerns about the use of helicopters to upgrade infrastructure on dams within the ALWA. These comments may request further information about the number of flights required for each alternative, question the permissibility of helicopter use in the ALWA in general, or cite the provision from the Wilderness Act banning the use of aircraft in wilderness areas.

Example: "The DPEIS also fails to evaluate the impacts of the hundreds, if not thousands, of helicopter flights required for this proposal, based only on the fact that a 1981 Environmental Assessment found the District's helicopter use then to be "permissible." That the District's limited emergency helicopter usage almost 40 years ago was found

permissible is irrelevant to whether the unprecedented and expanded helicopter use required for the projects proposed in the DPEIS would also be. Particularly where even just a couple of helicopter flights have been the subject of wilderness litigation, it is imperative that those impacts be scrutinized here" (Letter 20).

S.4. Protect for future generations: Mentions the importance of protecting wilderness for future generations.

Example: "With coming climate change, protecting these gifts will require our efforts to preserve and protect them for future generations" (Letter 18).

T. Recreation values: Mentions importance of recreation in the ALWA and concern for the Icicle Strategy's impacts on the experience of visitors. Letters may cite the organization's interest in wilderness recreation, the importance of the ALWA to recreationalists, or the impacts to recreation that may result from the proposed alternatives.

Example: "As organizations that represent hikers, climbers and mountain bikers in Washington state, our interest lies in ensuring that those who recreate in the Icicle Creek Subbasin can enjoy its trails and outdoor opportunities" (Letter 13).

***T.1. Destruction of trails/campsites*:** Mentions that projects may destroy existing trails and campsites within the ALWA. May mention flooding from the Eightmile Lake Storage Restoration or the Alternative 4 storage enhancement projects as a specific cause of these impacts.

Example: "We are concerned that the projects listed at Eightmile Lake could flood the trail and surrounding campsites" (Letter 13).

U. Scenic values: Mentions the scenic qualities of the ALWA (including the Enchantments) and concern for their preservation. This may include references to specific visual impacts from new infrastructure or general references to aesthetic changes and disturbances to the landscape.

Example: "Furthermore, the Enchantment Lakes Basin and surrounding area is one of the most treasured areas in the Alpine Lakes, renowned for its rugged beauty, enchanting lakes, and breadth of recreational opportunities. This is an area where management decisions require the utmost scrutiny and adherence to sustaining wilderness values" (Letter 381).

V. Ecological values: Expresses the ecological importance of the ALWA or wilderness in general and concern for the negative impacts that new infrastructure may have on natural systems. Specific concerns may reference impacts to stream ecology, biodiversity, water supply, or other ecosystem services as a result of altered hydrology.

Example: "Wilderness protections ensure the longevity of places that provide clean air and water, preserve biological diversity and offer people much needed refuge from crowded cities" (Letter 19).

***V.1. Aquatic/riparian ecosystems*:** Mentions the impacts that new dam infrastructure might have on the aquatic and riparian ecology of the streams in the ALWA. This may include changing volumes and timing of water releases from the lakes.

Example: "The DPEIS repeatedly ignores the negative impacts on the riparian ecosystems in the Alpine Lakes Wilderness from the proposed offseason releases of water from lakes, which alters stream hydrology" (Letter 379).

***V.2. Biodiversity/wildlife*:** Mentions importance of wilderness areas for providing wildlife habitat and sustaining biodiversity.

Example: "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" (Letter 12).

***V.3. Clean air/water*:** Emphasizes the role of wilderness in providing clean air and water to the entire watershed.

Example: "From wilderness we get clean air and water. Both move beyond the wilderness area boundaries" (Letter 18).

***V.4. Late summer drawdowns*: S**pecifically mentions the potential impacts of late summer drawdowns on wilderness lake ecology as a result of new infrastructure.

Example: "For example, impacts to Earth, Surface Water, Water Quality, Shorelines, and Fish and to Aesthetics, Recreation, and Wilderness from modifications to lakes in the upper Icicle drainage, for example, late summer drawdowns of Eightmile Lake under Alternative 4, would be significant" (Letter 17).

National: These themes express concern about the national-scale impacts from the inclusion of infrastructure projects within the ALWA.

W. Damage to federal wilderness system: Concern that allowing the proposed infrastructure projects within ALWA could weaken or compromise the entire federal wilderness system.

Example: "Opening up a beloved wilderness area for any development puts the entire wilderness preservation system in a compromised position" (Letter 19).

W.1. Unprecedented actions: Expresses the specific concern that the Icicle Strategy will establish a precedent for infrastructure development within federal wilderness areas. These comments specifically mention the words “unprecedented” or “precedent.”

> Example: “Without sufficient NEPA provided, the range of alternatives presented in the Draft PEIS includes actions unprecedented in the Alpine Lakes Wilderness. These actions could set a model that allows for further new actions in wilderness area; an undesirable outcome for all those working to protect the beauty of these lands” (Letter 13).

X. Neglects national stakeholders: Asserts that the infrastructure proposals within the ALWA disregard the interest of national stakeholders. These concerns may mention that federal wilderness belongs equally to all citizens or assert that the Icicle Strategy violates a national interest in wilderness protection.

> Example: “The Alpine Lakes Wilderness is federal public land that belongs equally to all Americans. As such, it's a shared natural resource that must be respected and protected. The national interest in preserving its wilderness character must be protected” (Letter 379).

Appendix D: Overview of themes from DPEIS Comment Letters

Table D: Overview of themes from DPEIS Comment Letters

			Organization Letters								Form Letters					
			12	**13**	**14**	**17**	**18**	**19**	**20**	**22**	**379**	**380**	**381**	**382**	**383**	
	Theme/*Sub-Theme*		39 Orgs	Rec. Orgs	ALF	Aud-ubon	OPA	PCTA	Wild. Soc.	Wise Use	Wild. Watch	Sierra Club	WA Wild	Wild. Soc.	WA Trails	**Total**
Positions	**A**	**Withdraw, revise, & re-release**	X	X	X		X		X	X	X	X	X	X	X	**11**
	B	**Oppose projects within ALWA**			X			X		X		X		X	X	**6**
	C	**Oppose Eightmile Restoration**	X	X									X			**3**
	C.1	*Litigation threat*											X			1
	D	**Oppose Alternative 4**	X	X				X	X		X		X	X	X	**8**
	E	**Support Alternative 5**	X		X				X		X					**4**
	F	**Conservation first**	X			X		X		X						**4**
IWG	**G**	**IWG not representative**	X							X						**2**
	G.1	*Lack of environmental groups*	X													1
	G.2	*Eastside/westside dynamics*	X													1
	H	**Issues with process**	X						X	X						**3**
	H.1	*Inflexibility within IWG*	X						X	X						3
	H.2	*Not receptive to outside concerns*	X						X							2
	H.3	*Restrictions on dissent*	X													1
	I	**Flawed Guiding Principles**	X							X						**2**

Table D: Overview of themes from DPEIS Comment Letters (Cont.)

			Organization Letters								Form Letters					
			12	**13**	**14**	**17**	**18**	**19**	**20**	**22**	**379**	**380**	**381**	**382**	**383**	
	Theme/*Sub-Theme*		39 Orgs	Rec. Orgs	ALF	Aud-ubon	OPA	PCTA	Wild. Soc.	Wise Use	Wild. Watch	Sierra Club	WA Wild	Wild. Soc.	WA Trails	**Total**
DPEIS/ SEPA	**J**	**Inadequate information**	X	X	X	X	X		X		X	X	X			**9**
	J.1	*Not enough legal analysis*	X	X	X	X	X		X		X	X	X			9
	J.2	*Must acknowledge USFS authority*	X		X						X		X			4
	J.3	*Inaccurate costs*	X								X					2
	J.4	*Missing emergency work on Eightmile*							X							1
	K	**Phased review inappropriate**	X			X			X							**3**
	K.1	*Deferred to project-level planning*	X			X			X							3
	K.2	*Misses cumulative effects*	X						X							2
	L	**Not reasonable range of alternatives**	X		X	X			X	X		X	X	X	X	**9**
	L.1	*All alternatives include ALWA projects*	X		X								X	X	X	5
	L.2	*Include more conservation*	X		X	X				X		X				5
	L.3	*Alternatives are too vague/unclear*							X							1
	L.4	*Include true "No Action" alternative*	X						X							2
	L.5	*Include alternative with dam removals*							X							1
	M	**Not enough mitigation**		X					X							**2**
	N	**Issues with SEPA process**	X						X	X			X			**4**
	N.1	*Did not take scoping concerns seriously*	X						X	X			X			4
	N.2	*No real chance for public debate*	X						X	X						3
	N.3	*Only considered Preferred Alternative*							X	X						2
	N.4	*SEPA should not follow IWG GPs*								X						1

Table D: Overview of themes from DPEIS Comment Letters (Cont.)

			Organization Letters								Form Letters					
			12	**13**	**14**	**17**	**18**	**19**	**20**	**22**	**379**	**380**	**381**	**382**	**383**	
	Theme/*Sub-Theme*		39 Orgs	Rec. Orgs	ALF	Aud-ubon	OPA	PCTA	Wild. Soc.	Wise Use	Wild. Watch	Sierra Club	WA Wild	Wild. Soc.	WA Trails	**Total**
Legal	**O**	**Illegal under fed. wilderness laws**	X	X	X		X	X	X		X		X	X		**9**
	O.1	*Wilderness Act of 1964*	X	X	X		X	X	X		X		X			8
	O.2	*ALWA management laws*	X		X			X	X							4
	P	**Illegal under state water law**	X	X	X	X			X		X		X	X		**8**
	Q	**Requires NEPA review**	X	X			X				X		X			**5**
ALWA	**R**	**Attachment to place**	X	X	X			X		X		X	X	X	X	**9**
	S	**Wilderness values**	X	X			X	X	X		X	X	X	X		**9**
	S.1	*Don't sacrifice wilderness for flows*	X				X					X		X		4
	S.2	*Mechanized equipment*	X	X				X	X							4
	S.3	*Helicopter flights*	X					X	X							3
	S.4	*Protect for future generations*	X				X	X								3
	T	**Recreation values**	X	X			X	X				X	X	X	X	**8**
	T.1	*Destruction of trails/campsites*	X	X											X	3
	U	**Scenic values**	X	X				X				X	X	X	X	**7**
	V	**Ecological values**	X	X		X	X	X			X			X		**7**
	V.1	*Aquatic/riparian ecosystems*	X	X			X				X					4
	V.2	*Biodiversity/wildlife*	X				X	X						X		4
	V.3	*Clean air/water*					X	X								2
	V.4	*Late summer drawdowns*				X										1
National	**W**	**Damage to federal wilderness system**	X	X			X	X	X			X		X		**7**
	W.1	*Unprecedented actions*	X	X			X	X	X					X		6
	X	**Neglects national stakeholders**	X				X	X			X					**4**

Appendix E: Co-Lead Responses to Themes

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters

	Theme		Response from Co-Leads	Explanation
Positions	**A**	**Withdraw, revise, & re-release**	**Rejected and explained**: DPEIS is sufficient and no major changes were made	The co-leads found that the DPEIS was appropriate and accurate for programmatic review. A supplemental draft is only required if there are substantial changes to the proposals or significant new information about adverse impacts. Since the co-leads made no significant modifications to the draft document, it is appropriate to issue the final PEIS directly and adopt a Preferred Alternative. Further review of specific elements will occur during project-level planning.
	B	**Oppose projects within ALWA**	**Rejected and explained**: ALWA projects are essential to meeting Guiding Principles	Projects within the ALWA were included in the Preferred Alternative. The co-leads determined that Eightmile Lake Storage Restoration and Alpine Lakes Reservoir Optimization, Modernization, and Automation projects were central to feasibly achieving the Guiding Principles.
	C	**Oppose Eightmile Restoration**	**Rejected but possible**: Project included in Preferred Alternative but may be modified in project planning	The PEIS does not preclude the possibility that the Eightmile Lake dam would be repaired to its current height rather than restored to its original capacity. In this circumstance, additional review may occur during project-level planning.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

	D	**Oppose Alternative 4**	**Accepted:** Alternative 4 not selected as preferred alternative	Alternative 4 was not selected as the Preferred Alternative. Co-leads noted concerns with enhanced storage and tunnels in wilderness.
	E	**Support Alternative 5**	**Rejected:** Alternative 5 not selected as preferred alternative	Co-leads noted support for Alternative 5 & IPID Full Piping and Pump Exchange.
	F	**Conservation first**	**Partially accepted**: Some additional conservation measures added	All alternatives include conservation. Additional conservation measures were added to the Preferred Alternative on the final PEIS. Domestic water use is already low in the basin compared to other communities in eastern Washington State.
IWG	**G**	**IWG not representative**	**Disagreed but invited**: IWG is open group and welcomes interested parties	Outside groups, including environmental NGOs, have been invited to participate in the IWG but have chosen not to. The IWG welcomes any new members and suggestions of groups to invite.
	H	**Issues with process**	**Partially addressed:** IWG meetings are open to public; other complaints not addressed	IWG meetings are open to the public and anyone is welcome to participate during the public comment period.
	I	**Flawed Guiding Principles**	**Disagreed:** Guiding Principles have widespread community support	Co-leads assert that the Guiding Principles have widespread support in the community.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

DPEIS	**J**	**Inadequate information**	**Disagreed and explained**: Sufficient level of detail for programmatic level review	The DPEIS has a sufficient level of detail to meet SEPA standards. As a programmatic analysis, it is meant to provide an overview of alternatives. Detailed review of specific projects will occur during project-level planning. A programmatic plan cannot predetermine permitting decisions outside the co-leads' authority.
			J.1 Not enough legal analysis	The legal analysis was accurate and sufficient for programmatic level review. According to available information, all alternatives within the FPEIS are legal. Further legal analysis for specific measure will occur during project-level planning, if needed.
			J.2 Must acknowledge USFS authority	The FPEIS describes USFS jurisdiction over the IPID easements in the ALWA. The FPEIS was clarified to further emphasize the role that the USFS would play as NEPA lead agency if special permits are needed.
			J.3 Inaccurate costs	The costs represent the best estimate for programmatic level review. On the FPEIS, a 25% contingency was added to the projected cost for all projects in the wilderness area.
			J.4 Missing emergency work on Eightmile	The emergency repairs to Eightmile Lake dam are not part of the Icicle Strategy and are outside the scope of the PEIS.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

	K	**Phased review inappropriate**	**Disagreed but clarified in FPEIS**: Phased approach provides comprehensive overview; FPEIS revised to clarify review process	A programmatic EIS is "inherently a phased review". Programmatic review provides decision-makers with a comprehensive overview of alternative plan but cannot predetermine the implementation of specific projects. The DPEIS was released at the earliest possible point to contribute to the decision-making process and with a sufficient level of detail. In response to concerns, FPEIS was revised to clarify environmental review process.
	L	**Not a reasonable range of alternatives**	**Disagreed and explained**: Alternatives were developed in response to scoping, were accurately portrayed, and appear feasible	A full range of alternatives were developed in response to scoping comments. All alternatives are outlined in appropriate detail for programmatic review, appear to legal, can feasibly meet the IWG's objectives.
			L.1 All alternatives include ALWA projects	All projects included the Eightmile Lake Storage Restoration for full transparency, since the IPID intends more forward with the project whether or not it is included in the Icicle Strategy. Alternative 3 does not include projects within wilderness *as part of the Icicle Strategy*, however.
			L.2 Include more conservation	Water use in the sub-basin is already relatively low. All alternatives include conservation elements. In response to concerns, additional conservation measures were added in the FPEIS. Removal of LNFH was not considered since it would undermine the Guiding Principles.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

			L.3 Alternatives are too vague/unclear	The alternatives were developed in response to distinct concerns from scoping. The amount of detail for each alternative was limited by the information available. The co-leads attempted to be transparent by acknowledging that certain projects may be replaced or may occur independently even if not selected as part of the Preferred Alternative.
			L.4 Include true "No Action" alternative	The No-action Alternative illustrates what would happen without the adoption of the Icicle Strategy. Under this scenario, the IPID would likely still implement projects within the ALWA. Thus, the co-leads included the projects to represent a more accurate baseline.
			L.5 Include alternative with dam removals	An alternative featuring dam removal within the ALWA could not feasibly meet the Icicle Strategy's objectives.
	M	**Not enough mitigation**	**Disagreed and explained**: Sufficient level of detail for programmatic level review	The DPEIS had appropriate detail for programmatic review. Mitigation measures will be more detailed in project-level review.
	N	**Issues with SEPA process**	**Disagreed and explained**: SEPA began at earliest possible point to guide decision-making and was conducted diligently	The co-leads followed SEPA protocol appropriately in developing the DPEIS. Scoping and the release of the DPEIS occurred at the earliest possible moment to point in order to guide decision-making. The alternatives were developed directly in response to public comments during scoping. As released, the DPEIS meets SEPA standards for a programmatic analysis and project-level level review will occur for all projects with potential significant impacts.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

Legal	**O**	**Illegal under federal wilderness laws**	**Disagreed but will be reviewed**: Exceptions to wilderness laws will likely apply, but compliance will be reviewed in project-level planning	There are previsions in the Wilderness Act that protect pre-existing private property rights and access to private inholdings in wilderness areas. The USFS has been an active member of the IWG planning process and will work with IPID to determine the conditions of the easement in accordance with federal wilderness laws. Further review will occur during project-level analysis when complete construction and design details are available.
	P	**Illegal under state water law**	**Disagreed but will be reviewed**: Exceptions to water rights abandonment will likely apply, but this determination has not yet been triggered	While a water right can be relinquished by non-use or abandonment, there are exemptions that may apply to IPID's storage rights in Eightmile Lake. This legal determination would occur during an extent and validity analysis, which is triggered by a water right permitting action. Since no permitting action has yet occurred in the subbasin, there has not yet been a determination.
	Q	**Requires NEPA review**	**Acknowledged and will occur**: NEPA will be conducted by USFS for federally permitted actions	NEPA will be conducted for all projects with a federal nexus, including USFS permits for actions within the ALWA. The co-leads coordinated with federal agencies prior to SEPA scoping develop an integration strategy. The FPEIS clarified the USFS role as lead agency in conducting NEPA.
ALWA	**R**	**Attachment to place**	**Noted and explained**: Projects will not affect Enchantments or PCT	The importance of ALWA and support for protections are noted. Proposed projects will not affect specifically mentioned places of concern, such as the Pacific Crest Trail or Enchantment Basin.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

	S	**Wilderness values**	**Covered in FPEIS**: Preferred Alternative would comply with law and cause "less than significant" wilderness impacts	The co-leads noted the concern for wilderness values. Programmatic review had found that the Preferred Alternative would have “less than significant” wilderness impacts. Further analysis will occur during project-level review. The FPEIS was modified to include a rough estimate of helicopter flights for each alternative. Overall, the long-term number of flights over the ALWA is expected to decrease with updated infrastructure.
	T	**Recreation values**	**Covered in FPEIS**: Impacts should be short in duration and would not affect most popular areas or flood trails	Recreation impacts are described in the PEIS. Construction impacts will be short in duration and the proposed projects will not impact the most popular recreation areas, such as the Pacific Crest Trail or Enchantment Basin. Alternative 4 would result in some flooding of trails/campsites but was not selected as Preferred Alternative. The Eightmile Lake Storage Restoration project should not impact existing trails and campgrounds. Further review will occur during project-level analysis.
	U	**Scenic values**	**Covered in FPEIS**: Further review will occur in project-level analysis	Scenic impacts are generally described in the FPEIS. Further review will occur during project-level review.
	V	**Ecological values**	**Covered in FPEIS**: Natural conditions do not currently exist and adverse impacts are unlikely	The Alpine Lakes are already dammed, so natural conditions do not currently exist. Drawdowns already occur at least once every five years on each lake. The DPEIS found that adverse impacts to aquatic ecosystems is unlikely and increased flow should have a beneficial effect. Further evaluation of aquatic impacts will occur during project-level planning.

Table E: Co-Lead Responses to Themes in DPEIS Comment Letters (Cont.)

National	**W**	**Damage to federal wilderness system**	**Noted and accepted**: All projects will comply with wilderness law	Support for public lands and wilderness is noted. Based on programmatic level assessment, all proposed actions in the ALWA appear legal. The co-leads will coordinate with USFS at project-level to ensure that every project complies with federal regulations, including wilderness law.
	X	**Neglects national stakeholders**	**Noted but not specifically addressed**	Support for public lands and wilderness is noted.