10-year Recreation Strategy for WDFW-managed Lands

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LETTER FROM THE DIRECTOR

I am pleased to present the 10-year Recreation Strategy for Washington Department of Fish and Wildlife (WDFW) Managed Lands. This strategy will improve visitor access and nature-based recreation experiences, while increasing protections for natural, cultural, and tribal resources.

Outdoor recreation is a cornerstone of the state's economy and supports the health of its residents. It helps to reduce stress, lower blood pressure, fight obesity, and even improve eyesight!

The COVID pandemic greatly magnified the benefits of access to nature and the importance of outdoor recreation. It is hard to imagine how we all would have made it through the past two years without places to get outside, breathe fresh air, and find respite from the stresses of confinement due to the pandemic.

Enthusiasm for outdoor recreation reached new peaks during the pandemic and shows no signs of slowing in the years to come. This is wonderful, but also poses a challenge.

Outdoor recreation impacts the natural systems it relies upon and must be carefully planned and managed to avoid irreversible damage. Good science and good sense must be employed to protect sensitive species and habitat where people visit and experience Washington's public lands.

The following strategy reflects WDFW's commitments to welcoming public access while conserving wildlife, habitat, cultural, and tribal resources. It marks a new beginning for recreation planning and management at WDFW. We will become more proactive and adaptive in minimizing the impacts of recreation and managing conflicts. We will do better at coordinating and consulting with tribes, collaborating with other land managers, engaging the public in decisions that affect recreation access, and communicating how and where people can recreate.

WDFW recreation planning and programs will consider the interests of Washingtonians of all ages, including our "traditional" recreationists who continue to enjoy hunting, trapping, fishing, and shellfish harvesting, and have led the conservation movement for many years, as well as new and diverse outdoor enthusiasts who are equally passionate about enjoying and creating lasting memories on public lands.

This strategy is ambitious, but I am confident that with the help of many partners and communities, we will succeed in charting and following a new path for planning and managing recreation on WDFW-managed lands.

WDFW invites all trusted partners from tribes, other government agencies, and all sectors to join us in the shared stewardship of Washington's public lands. Together, we will protect and preserve the legacy of these special places for future generations, both human and wild.

Kelly Susewind, Director

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Lead Author: Joel Sisolak

Graphic Design:

WDFW Project Sponsor: Cynthia Wilkerson

WDFW Executive Sponsor: Eric Gardner

WDFW Steering Committee and Work Groups:

- Alex Biswas
- Brian Calkins
- Christina Fremont
- Ciera Strickland
- Darric Lowery
- Elyse Woodruff
- Greg Meis
- Hannah Bates
- Janet Gorrell
- Joseph Buchanan
- Justin Haug

- Karen Edwards
- Lauri Vigue
- Mark Teske
- Marvin Williams
- Matthew Trenda
- Megan Zarzycki
- Patricia Jatczak
- Rachel Blomker
- Richard Finger
- Ross Huffman
 - Shane Belson

Tribal Acknowledgement

Outdoor recreation and conservation in Washington occur on the homelands of Native peoples, who have lived in this region from time immemorial. We express deep respect for and gratitude towards these original and active stewards of the region. Treaty tribes hold rights protected by federal treaties to engage in off reservation hunting, fishing, and gathering, and federal and state laws also protect cultural resources. Recreational planning activities must consider tribal interests and rights on public lands.

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EXECUTIVE SUMMARY

The Washington Department of Fish and Wildlife (WDFW) manages over a million acres of land in Washington state offering unique opportunities for exploration and recreation within intact and recovering ecosystems.

Like many public land managers, WDFW faces complex challenges in managing visitor access and recreation on department-managed lands. WDFW provides recreation access within the bounds of its steadfast commitment to protecting fish, wildlife, ecosystems, and tribal treaty resources now and into the future.

The goals of this 10-year strategy are to increase protections for cultural and natural resources, offer quality recreation opportunities on WDFW-managed lands, and strengthen relationships with tribal governments, partners, and stakeholders.

To achieve these goals, WDFW will pursue six strategic initiatives:

- 1. Use and Impact Monitoring: Develop and manage data systems that support recreation planning and management decisions.
- 2. *Recreation Planning*: Plan to accommodate outdoor recreation where it is compatible with conservation and other management priorities.
- 3. *Rulemaking*: Regulate recreation uses of WDFW-managed lands to protect the health and safety of fish, wildlife, habitat, department personnel, neighbors, and other visitors.
- 4. Travel Management: Develop a sustainable multimodal travel management program that addresses the designation, development, decommissioning, maintenance and monitoring of roads and trails on WDFW-managed lands.
- 5. *Education and Engagement*: Engage targeted populations in planning and managing recreation and encourage the development of a stewardship ethic in all visitors to WDFW-managed lands.
- 6. *Capacity and Funding*: Develop the tools, workforce, and sustainable funding to deliver on the vision of the 10-year Recreation Strategy for WDFW-managed Lands.

This strategy will require significant near- and long-term investment. The estimated non-capital cost for implementation is \$40 to \$60 million. Prioritized near-term actions include making WDFW-managed lands more welcoming, developing data and systems to support planning and management, curtailing illegal activity, piloting expanded recreation planning processes in priority areas, and ramping up department capacity for planning and managing recreation.

WDFW invites our partners and visitors to join us in this effort to enhance recreation opportunities on WDFW-managed lands while preserving these special places for generations to come.

INTRODUCTION

WDFW-managed Lands, A Precious Resource

The Washington Department of Fish and Wildlife is dedicated to preserving, protecting, and perpetuating the state's fish, wildlife, and ecosystems while providing sustainable fish and wildlife recreational and commercial opportunities.

Headquartered in Olympia, the department maintains six regional offices and manages dozens of wildlife areas and hundreds of water access areas around the state, offering fishing, hunting, wildlife viewing, and other recreational opportunities for the residents of Washington.

By actively managing lands, restoring habitats, and preserving wild places, the department serves as stewards for natural places in Washington, protecting the state's land and water for its human and wildlife populations.

Healthy and intact ecosystems provide both ecological and social value for Washingtonians. They clean our air and water, mitigate the effects of climate change, provide habitat for threatened and endangered species, and offer opportunities to encounter nature in ways that attract more people to live, work, and play in Washington. The health of the outdoors is essential to the quality of outdoor recreation in our state.

WDFW is mandated to "maximize fishing, hunting, and outdoor recreational opportunities compatible with healthy and diverse fish and wildlife populations" (R.C.W. 77.04.055). WDFW has a long history and ongoing commitment to supporting hunting and angling in Washington both on and off of WDFW-managed lands. The focus of this strategy is to expand planning and management to address other forms of outdoor recreation on WDFW-managed lands and their compatibility with conservation goals and ensure access to the diverse residents and visitors of Washington.

WDFW-managed lands offer unique opportunities for exploration and recreation. Where some land managers offer more developed facilities or highly programmed recreation opportunities, visitors travel to WDFW lands for a more "off the beaten track" experience. WDFW recreational facilities are often "primitive." We emphasize opportunities to experience nature within intact and recovering ecosystems and invite visitors to work with us to preserve these special places for future generations of people and wildlife.

A Changing Landscape

Outdoor recreation is a major contributor to the economic health and quality of life in Washington State. To be sustainable, recreation planning and management must continually adapt to a changing landscape, which includes a growing and diversifying population with changing values and recreation interests, growing pressures on species and habitat from development and land use, and a changing climate, which already is affecting the health of WDFW-managed lands and the quantity and quality of recreation opportunities they can support.

Population growth and demographic shifts

Washington's population grew by nearly a million residents in the last decade bringing the total to 7.7 million with most of the growth concentrated in larger cities across the state. We anticipate a million more residents by 2040 with most growth coming from migration (Office of Financial Management

2020). Many individuals and families will move here for the State's natural beauty and access to outdoor recreation.

The state population will also continue diversifying and aging. Over 650,000 limited English proficient persons were estimated to be living in Washington State in 2016, a 5% increase since 2014 (Office of Financial Management, 2019). In 2016, the percent of people of color in Washington was estimated at 30% of the total population. By 2040, it is expected to be 44% (Washington State Recreation and Conservation Office 2020). By 2030, more than one of every five Washingtonians will be 65 years old or older (Fox, 2014), which also implies a higher number of people with disabilities wanting to recreate on public lands. In 2019, 37.4% of Washingtonians above 65 years of age self-reported a disability (DHDS, n.d.).

Shifts in recreation preferences

Over the past several decades, the ways Washingtonians and Americans recreate outside have been shifting, which has stimulated a national conversation among fish and wildlife agencies about relevancy (Dunfee, et al., 2014). The number of hunters and anglers is declining. Reasons given by former hunters and anglers for no longer engaging in these activities include shortage of free time, loss of interest, and lack of good places to hunt or fish.

License sales associated with hunting and fishing have historically been the primary funding base for WDFW and other fish and wildlife agencies nationwide; declines in these activities will likely impact WDFW's ability to conserve fish, wildlife and habitat. According to research conducted for the Council to Advance Hunting and the Shooting Sports, "reductions in conservation revenue (from hunting and fishing) may begin as early as 2024, and by 2032 state wildlife agencies and other conservation organizations may face great challenges in revenue shortages, loss of political capital, and shrinking social relevancy (Chase & Chase Consulting, 2017)."

While participation in hunting and fishing has declined, wildlife viewing has grown rapidly in recent years and is especially popular among older Americans. The 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Department of Interior, USFWS, US Department of Commerce, US Census Bureau, 2016) estimates that 65% of wildlife watchers are over the age of 45, with 45% above the age of 55.

In Washington, 50% of outdoor recreationists enjoy wildlife or nature viewing and that number is expected to grow (Jostad et al 2017). WDFW-managed lands also have seen a steady increase in recreational target shooting and trail-related activities, including walking, hiking, biking, trail running, motorized recreation, and horseback riding. WDFW-managed water access areas have steadily become more popular for boating, swimming, and paddling.

Shifts in participation frequency

Nationally, there is a "casual participation" trend in outdoor recreation, where the number of "casual participants," those participating less than once a month, has steadily grown for more than a decade as the number of "core participants," those participating more than once per week, has declined (Outdoor Foundation 2021).

The most dedicated participants often recruit friends into outdoor recreation, introduce their children to their favorite activities, and sometimes turn their hobby into a business. Newer, less experienced

outdoor enthusiasts tend to be less aware of the cumulative impacts of outdoor recreation and less familiar with how to recreate safely and responsibly.

Recreation during COVID pandemic

States around the U.S., including Washington, have seen a surge of new recreationists during the COVID pandemic. Providing much needed respite, public lands allowed people to escape the stress of household confinement, retain a sense of connection with the outside world, get fresh air, exercise, and enjoy a host of recreation activities while social distancing. According to a report commissioned by the Outdoor Foundation (2020), 2020 experienced record outdoor recreation rates with 53% of Americans ages 6 and over reporting participation in outdoor recreation at least once.

The pandemic has attracted more diverse and many new or returning outdoor recreationists. Compared to 2019 demographics, new recreationists are more likely to identify as female, younger, more ethnically diverse, more urban, and lower income. Walking is the most reported new outdoor activity. One-quarter of new participants reported running/jogging and/or bicycling. Birdwatching and fishing form a third tier of new or resumed activities (Outdoor Industry Association & Naxion, 2021).

During the COVID pandemic, some outdoor recreation industries surged in growth. Dollar sales of bicycles in the U.S. increased by 63% during 2020, paddle sports increased by 56%, and camping by 31%. Binocular sales increased by 22% driven by greater interest in bird watching and other nature appreciation activities.

In 2020, WDFW sold 45,000 more fishing licenses and 12,000 more hunting licenses compared to 2019, representing a 16% increase in fishing license sales and a 40% increase in hunting license sales. These increases at least temporarily reversed a long-term trend of declining rates of hunting and fishing in the state. Sales of Discover Passes for access to state lands increased 19%. It is uncertain whether the recent increases in license and pass sales and associated activities will be sustained post-pandemic (Washington Department of Fish and Wildlife & Climate Impacts Group, 2021).

Impacts of climate change on outdoor recreation

Wildfire and smoke, warming oceans and streams, shifts in snowfall, snowpack and altered hydrology, ocean acidification, sea level rise, and resulting shifts in the distribution of species and the habitats that support them are likely to impact WDFW's ability to provide some outdoor recreation opportunities to Washingtonians and visitors.

Climate change is likely to exacerbate existing challenges to fish hatchery management and fishing opportunities across the state via warming stream temperatures, projected declines in summer flows, increasing prevalence of disease and invasive species, as well as sea level rise. Shell fishing will also likely be affected, with more frequent closures of recreational shellfish harvest along Washington's coast due to impacts on shellfish populations and increasing incidence of harmful algal blooms.

Climate change also may lead to reduced hunting opportunity as some species such as moose and geese decline due to climate impacts, and recreation access in general may be constrained by closures and restrictions due to increased flooding and wildfires. In 2020 and 2021, large wildfires burned thousands of acres of habitat, including critical habitat for endangered and threatened species, which forced early bans of target shooting, campfires, and camping in much of Eastern Washington, and greatly reduced air

quality in much of the state. The long-term impacts on species and habitats from the increasing frequency and magnitude of wildfires is unknown.

Recreation Impacts

A report published by the Tulalip Tribes (Nelson & Bailey, 2021) points to "a mounting body of scientific literature nationally (that) bears out tribal members' concerns locally: recreation, both motorized and non-motorized, can and does have a significant environmental impact. Cumulatively, recreational activities can influence the range and health of fish and wildlife species and habitat, degrade vegetative communities, and result in human presence and disturbance throughout even the most remote areas of public lands and treaty areas, regardless of season."

WDFW shares tribal partners' concerns about the impacts of outdoor recreation on habitat and wildlife. The extensive literature on this subject leads to the conclusion that while recreation provides many economic, health and social benefits, recreation negatively affects wildlife and can result in an overall decrease in biodiversity.

Impacts on habitat

Recreational infrastructure, such as natural surface trails, snow sport areas, and roads can affect the amount, quality, and connectivity of wildlife habitat. Natural surface low-density trails are not typically associated with habitat fragmentation for mid- to large-sized species. However, trails can fragment habitat for species with lower mobility, especially when trail density is high or when trails are wide and paved (Miller et al., 2020).

Outdoor recreation can also alter soil characteristics, spread invasive plant and animal species, and degrade water quality via sedimentation due to erosion from facilities such as roads and trails (Hammitt et al., 2015, Marion et al., 2016) and by pollution from motorized vehicles entering water sources (Havlick, 2002). Illegal visitor behavior, including litter, dumping, creation of informal roads and trails, and vandalism also contribute to and accelerate impacts due to legal use. Together, these impacts degrade wildlife habitat, changing the availability of important resources such as food, shelter, and water (Miller et al., 2020).

Impacts on wildlife: Individuals, populations, and communities

Impacts on wildlife from outdoor recreation can include direct mortality or manifest as changes in behavior or physiology, which may ultimately affect survival and population stability (Tablado & Jenni, 2015). Animals tend to have stronger responses to less predictable forms of recreation, suggesting that consolidating rather than dispersing use reduces the human footprint and corresponds with a reduced overall impact on wildlife. Reproductive status of a species is important; pregnant females and young tend to be more vulnerable to disturbance. Habitat generalists (i.e., species that can eat a variety of foods and thrive in a range of habitats) like crows that can adapt to and even thrive in a very disturbed area, are less vulnerable than habitat specialists that depend on a particular type and quality of habitat, prey, or forage area.

Wildlife responses can differ among seasons, with winter terrestrial recreation activities presenting more evidence of negative effects on wildlife than recreation other times of the year (Larson et al., 2016). Wildlife must expend more energy to avoid humans in winter, while food availability and quality is often lower. Negative effects of snow-based activities were observed 1.3 times more frequently than

for all other terrestrial activities (Miller et al., 2020). These impacts may become more pronounced as climate change reduces snow levels in the state and concentrates winter recreation in fewer areas.

In many studies, nonmotorized activities has shown 1.2 times more evidence of negative effects of recreation than motorized activities (Larson et al. 2016). However, most studies do not compare effects across multiple spatial scales. The impacts of motorized recreation might be greater because of the larger area that can be covered by vehicles (Harris et al. 2014, Larson et al. 2016), as well as the extent of associated noise (Barber et al., 2009, Keyel et al., 2018). Motorized vehicles can also cause other types of disturbance, such as soil loss and vegetation disturbance (van Vierssen Trip & Wiersma, 2015).

Managing impacts to wildlife and habitat

The principal factors influencing the intensity of impacts on wildlife and habitat are: 1) the frequency of recreation and the number and concentration of users on the landscape; 2) types of recreation and recreationist behavior; 3) season or timing of recreation and 4) the sensitivity of particular species and/or habitat to disturbance.

An extensive literature review published by the United States Forest Service (USFS) recommends minimizing the impacts of recreation on wildlife by 1) using social science to understand and direct visitor interactions with public lands, 2) planning new recreation programs and infrastructure to protect sensitive species and habitat, and 3) managing existing recreational programs and infrastructure by consolidating use in durable zones and establishing an adaptive management framework for monitoring and correcting impacts (Miller et al., 2020). Other recommendations from relevant literature include spatial restrictions, visitor education, enforcement of existing rules, and limiting visitation (Larson et al., 2016).

Miller et al (2020) recommend consulting with recreation groups to understand visitor preferences and where conflicts may arise with known and potential wildlife habitat and movement. They also recommend crafting public communication that frame instructions in positive ways and promote desirable behaviors rather than trying to prevent problematic behaviors.

Planning and developing new recreation areas should minimize overlap with important habitat, provide buffers for sensitive species, maintain large unfragmented landscapes where possible and connectivity between habitat patches, reduce noise and visual disturbance, and time recreation to minimize negative impacts on wildlife such as during denning or nesting seasons. Sensitive and biologically important periods differ by location, population, and species.

For existing recreation areas, Miller, et al. (2020) recommend concentrating recreation use in zones with habitat and wildlife that are less vulnerable to disturbance and providing limited or dispersed recreation use in more sensitive areas. Closures and restrictions should be case specific and justified by a clear risk, with monitoring to measure the efficacy of management decisions wherever feasible.

Generally, higher intensity of use requires higher intensity of both direct and indirect management¹ with more direct management at places of high use and/or ecological sensitivity and more indirect management in places with lower risk of conflicts or impacts to habitat and wildlife. Direct management

¹ Management practices can be classified along a spectrum according to how directly they act on visitor behavior. As the term suggests, "direct management" practices directly manage visitor behavior, leaving little or no freedom of choice. (Park, et al., 2008).

practices include regulation and enforcement. Indirect management practices rely on voluntary actions by visitors, typically in response to education and engagement.

Conflicts

Conflict in outdoor recreation is defined by Jacob and Schreyer (1980) as "goal interference" attributed to another individual's or group's behaviors. They describe four contributors to recreation conflict: activity style, resource specificity, mode of experience, and lifestyle tolerance. These factors establish preconditions that can trigger a conflict given certain behaviors or other stimuli (Manning, 1999).

Activity Style

Personal meanings attached to a recreation activity and differing standards for how the activity "should be done" can lead to conflict. Intensely involved or "core participants" generally apply more stringent norms of behavior to their activity and have more specific expectations for what constitutes a quality recreation experience than newer or more casual participants. More specific expectations increase sensitivity to impacts to their experience from less active participants and people outside of their activity who do not conform to their norms of behavior.

Resource specificity

Attachments of meaning to a specific place also increase the chance of conflict. A person well acquainted with a place has defined expectations about the types and quality of experiences to be found there. In many cases, a strong relationship to place can motivate a commitment to shared stewardship and should be encouraged. However, conflict can occur if a person becomes possessive of a place and rankles against changes of use of the area by a land manager or use by "outsiders" who they suspect to have less appreciation for "their" place's value.

Mode of experience

Jacob and Schreyer describe a continuum of ways, or modes, of experiencing an environment that ranges from focused to unfocused modes of experience. Recreationists in a focused mode value stopping to "smell the roses," and probably touch them and photograph them as well. Recreationists in unfocused modes tend to value moving through space and the lay of the land, but rarely stop to closely observe specific elements of an environment. When a person in focused mode encounters a person in unfocused mode, conflict can result. The greater the gap between the two on the focused-unfocused continuum, the greater the risk of conflict.

Tolerance for diversity

People intolerant of diversity are prone to conflict. Unwillingness to share resources or space with members of other groups based on their race, gender-identity, ability, or class is expressed on public lands as in society at large. Groups can pursue the same activity following the same rules and conflict may still emerge.

Conflict also can occur where a user group assigns a higher intrinsic value to its own favorite recreation activity over another's. A user group may foster a stereotype of another group or its members and desire to exclude the "out group" in favor of their own.

Managing conflict

Separating conflicting activities through zoning is a common approach to managing conflict and can be highly effective for distancing one activity from another (Manning, 1999). However, the factors

described above suggest that conflict in outdoor recreation can be rooted in causes beyond the incompatibility of activities. Research suggests recreation management should separate incompatible recreation, while also addressing these underlying causes via education programs.

Education and engagement efforts can help establish a baseline code of conduct or etiquette for all recreationists, which reduces the risk of direct or indirect conflict (Manning, 1999). Education and engagement can also increase tolerance for other types of groups and activities by facilitating dialogue and highlighting values or beliefs shared among recreation groups. For example, an education program may emphasize a general shared concern on the part of recreationists for the impacts they have on others, and a willingness to adapt behavior or limit use to lessen such impacts (Hammitt et al., 1982).

Addressing conflict in a timely manner can avoid unnecessary and potentially costly escalation. Where possible, it is best to recognize the potential for conflict at a stage where preventive actions can be taken.



10-YEAR RECREATION STRATEGY FOR WDFW-MANAGED LANDS

Purpose

The goals of this strategy are to increase protections for natural and cultural resources, enhance recreation access and experiences on WDFW-managed lands, and strengthen relationships with partners and stakeholders.

Vision

In 2020, WDFW adopted a 25-year strategic plan, A Path to a New Era for Fish, Wildlife and People. The strategic plan envisions:

- Healthy and sustainable fish and wildlife populations
- A restored network of resilient habitats that connects ecosystems across the landscape
- Abundant recreational, stewardship, commercial, and educational opportunities available to diverse populations
- Residents with a deep appreciation of the intrinsic value of nature and the benefits of fish and wildlife and who have a strong sense of personal stewardship and environmental responsibility
- A department that reflects and connects with the diverse public we serve and is a model of great governance.

The 10-year Recreation Strategy for WDFW-managed Lands is grounded by this 25-year vision and critical to the department's success in achieving its long-term strategic goals for the state.

Approach

The Lands Division of the Wildlife Program at WDFW drafted the 10-year Recreation Strategy for WDFW-managed Lands in collaboration with colleagues from within and outside the department. It includes input from leaders and experts within WDFW's Wildlife, Fish, and Habitat programs, as well as Enforcement and the Capital and Asset Management Program.

WDFW also sought early input from external partners, including tribal governments and other government agencies, as well as nonprofit groups representing conservation and various outdoor recreation interests. This input guided the development of the strategy and will guide its implementation.

The strategy emphasizes a need for good science and data to support planning and management decisions, as well as an adaptive and iterative approach to the implementation of recreation programs. It also attempts to synthesize and adapt proven best practices tested by other land managers within Washington and beyond.

The strategy is designed to be targeted and sensible and prioritizes outreach and engagement to historically excluded and local communities to improve recreation opportunities for all. The strategy phases implementation to prioritize critical actions in high intensity use and ecologically sensitive areas and increases capacity at statewide and regional scales where it is most needed.

Six Strategic Priorities

The implementation plan for the strategy is organized by the following six strategic priorities. These do not represent the entirety of the department's efforts to plan and manage recreation on WDFW-managed lands, but highlights areas prioritized for attention in the decade ahead.

- 1. Use and impact monitoring
- 2. Recreation planning
- 3. Rulemaking
- 4. Travel management
- 5. Education and engagement
- 6. Capacity and funding

Evaluation and Revision

The WDFW Statewide Recreation Strategy is a 10-year initiative. In coordination and cooperation with partners, WDFW will take an adaptive approach to implement the strategy that applies the best available data and science for balancing conservation and recreation.

Between 2022 and 2032, WDFW will provide progress updates to the public and make course corrections in response to changing conditions on WDFW-managed lands, available WDFW capacity for advancing the strategy, and changing needs and expectations of the recreating public. Progress reports and revisions to the strategy will be published on the WDFW website.

Coordination and Consultation with Tribes

On April 7, 2021, Governor Inslee signed Executive Order (EO) 21-02 reflecting the State's commitment "that impacts to cultural resources must be considered as part of any state funded project or investment." The process includes consultation with tribal governments and the Department of Archaeology and Historic Preservation. (DAHP, 2021)

WDFW is committed to coordination and consultation with the federally recognized tribes located in, or with rights in, Washington State. The department adopted Policy 5007 – Consultation and Coordination with Tribal Governments on November 16, 2020. This policy complements EO 21-02 and any other existing laws, rules, statutes, or regulations that guide consultation processes with Indian Tribes. Policy 5007 provides guidelines and expectations for WDFW employees to consult and coordinate on a government-to-government basis with federally recognized tribal governments.

Consistent with EO 21-02 and WDFW Policy 5007, WDFW commits to coordination and consultation with tribes on the development and implementation of the 10-year Recreation Strategy for WDFW-managed lands. A letter was sent to federally recognized tribes on October 4, 2021, offering formal consultation on a draft of the Strategy. WDFW also will seek opportunities to collaborate with tribes and other experts in developing systems and programs for measuring, monitoring, and mitigating the impacts of outdoor recreation on tribally significant cultural and natural resources.

Collaboration with State and Federal Partners

Beginning in October 2020, WDFW initiated a series of on-line meetings with tribes to elicit input to the development of the 10-year Recreation Strategy for WDFW-managed Lands. Tribes requested that subsequent meetings include more public land managers. Succeeding meetings included Washington Department of Natural Resources, Washington State Parks, Washington State Recreation and

Conservation Office, and regional USFS leadership to discuss issues related to outdoor recreation. Themes from the meetings included concerns about the near and long-term impacts of recreation on wildlife, habitat, and indigenous rights and calls for more capacity for monitoring recreation impacts and regulating recreation on public lands. Participants also acknowledged that the capacity of Washington's land managers to manage recreation is hindered by current funding levels across all agencies.

The meetings emphasized the need for greater coordination and collaboration among public land managers. Each agency, including WDFW, has a unique mission and mandate for the management of lands under their stewardship. Each plays a unique role in welcoming recreation and conserving natural and cultural resources, but alignment around common needs and opportunities should be further explored.

The challenges of simultaneously accommodating increasing volumes of recreation, addressing recreation conflicts, and protecting environmental and cultural resources are not unique to WDFW. All public land managers in Washington and across the country face similar challenges and opportunities. There are efficiencies and benefits to the public when agencies work together to address these challenges, and the reality that social and environmental impacts cross administrative boundaries compel us to collaborate.

Land managers in Washington form a community of practice² with significant internal expertise and opportunities to partner with external experts in the public, private, and nonprofit sectors. We have much to learn from each other and further alignment and collaboration would benefit public lands and the public for whom these lands are managed.

Areas for near-term collaboration may include:

- development and management of data and processes to support a statewide recreation impact monitoring system,
- adoption of a shared land classification system that identifies a spectrum of recreation opportunities across state-managed lands,
- development of shared communication strategies and messages for educating the public about the impacts of recreation on wildlife and habitat, and
- coordination in pursuing much needed financial support for the long-term sustainability of conservation and recreation efforts across agencies.

Conservation and Recreation Principles

To help facilitate greater collaboration among land managers and partners, WDFW recommends the establishment of a set of shared principles that express our shared values and provide guiding tenets for balancing conservation and recreation. WDFW has adopted the following seven principles, which are adapted from the Shift Principles (Shift 2017) in consultation with tribal partners and state government partners.

² "Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly." (Wenger-Trayner & Wenger-Trayner, 2015)

- 1. Recreation can inspire conservation, and both recreation and conservation are essential to sustain Washington's quality of life.
- 2. Outdoor recreation opportunities must be accessible for all visitors to enjoy regardless of ability, race, socioeconomic status, gender identity, or sexual orientation.
- 3. Outdoor recreation and conservation require that a diversity of lands and waters be publicly owned, available for public access, and well stewarded.
- 4. Recreationists have an obligation to minimize their impacts by recreating responsibly.
- 5. Proactive, professional planning and management, combined with public education, are necessary to maintain and restore ecological integrity and healthy landscapes, ensure and maintain the ability of tribal communities to engage in traditional and treaty protected activities, and provide quality recreation opportunities.
- 6. Physical, biological, and social science, alongside tribal knowledge and treaty rights must inform the management of outdoor recreation.
- 7. Stable, long-term, and diverse funding sources are essential to protect the environment and support outdoor recreation.

WDFW invites other land managers in Washington, and other partners in the public, nonprofit, and private sectors, to adopt these or similar principles.

1: USE AND IMPACT MONITORING

Goal: Develop and manage data systems that support recreation planning and management decisions.

To support science-informed decisions for balancing conservation and recreation, WDFW needs better and consistent data to inform planning and management decisions, including the number of people visiting WDFW-managed lands, visitor preferences on how they wish and plan to recreate, the condition of recreation facilities, and the impacts of recreation on wildlife and habitat.

Greater predictability of the number of anticipated visitors and their preferred activities would allow a more proactive approach for planning and developing recreation facilities and instituting direct and indirect management as needed in various locations. Understanding who visits WDFW-managed lands also will inform communication and engagement strategies for welcoming visitors and engaging recreation groups in educating their members.

Monitoring the impact of recreation on facilities, wildlife, and habitat also will require new investments in data development and analysis. According to a 2021 literature review by the Tulalip Tribes, "While the economic and health benefits of outdoor recreation have been well-analyzed in Washington State, research on the environmental impacts of recreation to fish, wildlife, plants and their habitats is very limited" (Nelson & Bailey, 2021). State and regional data and analysis are needed to complement existing species and habitat data and a growing body of national and international scientific research on the impacts of recreation.

Table 1. Common forms of recreation impact on habitat and wildlife (Leung and Marion 2000).

	Soil	Vegetation	Wildlife	Water
Direct	Soil compaction	Reduced height and	Habitat alteration	Introduction of exotic
effects		vigor		species
	Loss of organic	Loss of ground	Loss of habitats	Increased turbidity
	litter	vegetation cover		
	Loss of mineral	Loss of fragile	Introduction of exotic	Increased nutrient
	soil	species	species	inputs
		Loss of trees and	Wildlife harassment	Increased levels of
		shrubs		pathogenic bacteria
		Tree trunk damage	Modification of	Altered water quality
			wildlife behavior	
		Introduction of	Displacement from	
		exotic species	food, water, and	
			shelter	
Indirect/	Reduced soil	Composition change	Reduced health and	Reduced health of
derivative	moisture		fitness	aquatic ecosystems
effects				
	Reduced soil	Altered	Composition change	Composition change
	pore space	microclimate		
	Accelerated soil	Accelerated soil	Reduced	Excessive algal
	erosion	erosion	reproduction rates	growth

Altered soil	Increased mortality	
microbial		
activities		

Finally, better data are needed for tracking the condition of recreation facilities. Facilities including roads, trails, restrooms, boat ramps, shooting ranges, hunting and wildlife viewing blinds, camping areas, parking lots, and signs all require regular or semi-regular maintenance. Tracking the maintenance levels of facilities will help WDFW prioritize spending towards maintaining a high-quality visitor experience, reducing deferred maintenance costs, preventing environmental damage, and minimizing the risk of long-term damage to capital investments.

Action Plan

	OBJECTIVE		DELIVERABLE	
1.1	Track visitation levels, visitor demographics and recreation use preferences.	1.11	Visitors use data	Data are needed for recreation planning, management, and communication with lawmakers, funders, and the public about the levels of recreation use on WDFW-managed lands.
				WDFW will regularly collect and analyze data on visitor use, where they travel from to WDFW-managed lands, and length of stay to establish use rates and trends of use.
		1.12	Visitors survey data	As the state population grows and outdoor recreation interests diversify and shift, WDFW needs data on visitor demographics, how visitors are using public lands, including WDFW-managed lands, and how they might use lands in the future. These data are needed for prioritizing resource allocations and managing demand. To understand visitor preferences for outdoor recreation, WDFW will analyze data from partner organization efforts, including but not limited to surveys conducted by RCO (2022 SCORP survey), Washington State Parks (2021 Discover Pass survey), and the US Fish and Wildlife
				Service (2021 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation). Additional survey tool(s) will be developed as needed to fill data gaps.

1.2	Monitor ³ recreation impacts on natural and cultural resources, recreation facilities and recreation experiences.	1.21	Visitor- supported data collection	To support maintenance of recreation areas and facilities, WDFW needs a consistent method for documenting and monitoring facility conditions, especially in heavily traveled visitor areas. The department currently uses ArcGIS Online for Organizations to engage visitors, volunteers, and staff to report wildlife sightings and incidents of disease. WDFW will independently or with partners develop a similarly easy-to-use platform for collecting data on the condition of recreation areas and facilities to support their maintenance.
		1.22	Environmental Impact data and monitoring	To inform decisions about where to allow and how to manage recreation, WDFW needs data, a process, and capacity for monitoring the long-term impacts of recreation on habitat and wildlife. In collaboration with other land managers or independently, WDFW will design and deploy an impact monitoring system that tracks changes to the environment associated with specific recreation facilities and activities. This may include engaging visitors and volunteers in alerting the department about habitat and wildlife impacts via an application on their phones.

³ Monitoring is the ongoing, orderly process of repeatable data collection and analysis that informs management decisions (Bedel 1998).

2: RECREATION PLANNING

Goal: Plan to accommodate outdoor recreation where it is compatible with conservation and other management priorities.

Planning is critical in a time of increased demand for recreation opportunities, significant regulatory compliance requirements, limited public space and financial resources, and increasing stress from climate change on natural and cultural resources on WDFW-managed lands. Planning is about proactively solving problems, making decisions, and leveraging resources. Planning brings data analysis, public involvement, and accountability together in a creative and dynamic process that describes what is possible and allocates resources to what is practical.

Plans document management objectives and decisions. However, they also should remain adaptive to new science and information, including changes in use or other circumstances. To be adaptive, plan objectives should include regular evaluation to facilitate course corrections over the lifespan of the plan's implementation.

WDFW should perform recreation planning at multiple geographic scales. The department will set up a land classification system to define general use levels on WDFW-managed lands, and establish setbacks and buffers to protect wildlife, habitat, and cultural resources, and analyze options for permitting systems to protect resources and quality visitor experiences.

Development of plans and their implementation should be done in coordination and consultation with tribes and include engagement with affected partners, wildlife area advisory committees, adjacent landowners, and other local and regional stakeholders.

Action Plan

	OBJECTIVE		DELIVERABLE	
2.1	Define recreation use levels and buffers to guide development and management.	2.11	Land classification system	A statewide system is needed to establish and communicate a spectrum of recreation opportunities across WDFW-managed lands, which: • Protects natural, cultural and tribal resources • is easy to apply and understand for internal and external audiences • reflects department commitments and priorities across the state • provides a foundation for local planning • provides transparency for recreation use decisions
				WDFW will develop, pilot, and apply a land classification system based on the Washington State Parks system (WAC 352-16-020) and adapted to fit the WDFW mission. The classification system will include guidelines for each land classification that defines and

		2.12	Buffers and setbacks	outlines the philosophy of each classification, its appropriate facilities, location, allowed and prohibited activities, and allowed and prohibited developments. Buffer zones and setbacks provide heightened protection for areas and features that have significant environmental or cultural value, including geographic areas that have tribal significance. WDFW will develop and apply standards for designing and constructing recreation facilities that preserve buffers ⁴ for critical habitats, ⁵ sensitive species, and cultural resources.
		2.13	Permitting systems	The type, timing, frequency, and volume of recreation must at times be limited in sensitive areas to mitigate negative impacts to local habitats and species, preserve tribal access for cultural activities, and/or preserve treasured elements of a recreation experience, including opportunities for quiet and solitude within an intact ecosystem. WDFW will analyze options for developing and testing permitting systems for WDFW-managed lands that limit recreation activities and access based on an area's carrying capacity ⁶ for seasonal and year-round use.
2.2	Plan at the regional and local scales in response to current and emerging recreation demands.	2.21	Water access area management plans	WDFW manages 450+ water access areas on the state's lakes, rivers, and marine waters and owns hundreds of miles of streambank easements. As recreational and commercial use pressures have increased and management needs and resource allocation decisions grown more complex, there is an increased need for access area management planning in each region. WDFW will develop and implement a regional access area management planning process beginning with a pilot in Region 4 (North Puget Sound). Resulting plans will provide a holistic

 $^{^{\}rm 4}$ "Buffer" means the area adjacent to the outer boundaries of a critical area.

⁵ "Critical habitat" means habitat areas with which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating).

⁶ "Carrying capacity" may be defined as "the amount and type of use that is compatible with the management prescription for an area." (Whitaker, et al., 2011).

		approach to the operations and maintenance of a region's access areas and reflect department obligations and priorities for optimizing public recreation opportunities.
2.22	Wildlife area management plans	Each of WDFW's 33 wildlife areas is guided by a management plan that addresses how the department will meet its mission to preserve, protect, and perpetuate fish, wildlife, and ecosystems. WDFW planners need additional tools for determining the compatibility of recreation in wildlife areas and regulating recreation use.
		WDFW will develop and implement a recreation planning module for integration into the existing ongoing wildlife area management planning process. The recreation planning module will include spatial analysis to determine the suitability of recreation uses by season in specific wildlife area units and help ensure that recreation uses support wildlife area plans and other management goals and objectives
2.23	Travel management area plans	To increase consistency and simplicity, local recreation and travel network investments should be developed using design guidelines and planning processes applied consistently across WDFW-managed lands.
		Travel management areas (TMAs) should be developed in areas of concentrated road/trail use and/or where there is risk for conflict among users.
		WDFW will develop and pilot a TMA planning process. Following the pilot, an improved TMA process will be applied at TMAs across the state as needed (See Strategic Priority 4: Travel Management).
2.24	Shooting range plans	There is an increased demand for formal designated shooting ranges as enthusiasm for shooting sports has expanded and the number of informal sites for target shooting has decreased due to enhanced regulation.

		and near an area under consideration and ensure adequate public process in the placement of ranges in areas compatible with other local uses. A range plan also should consider potential environmental impacts and opportunities for lead recovery. WDFW currently operates seven ranges on six wildlife areas. Range planning takes place on an ad hoc basis. WDFW will develop a more formal planning process to increase efficiency and accelerate the delivery of ranges as needed.
2.25	Camping area plans	Demand for camping is growing in the state. Dispersed camping use has increased on WDFW-managed lands causing social and environmental impacts in some areas, including noise, litter, soil compaction, water pollution, damage to vegetation. Improving management of camping and designating more camping sites in suitable areas will help accommodate demand and protect sensitive areas from the impacts of intensely used informal sites. WDFW operates a small number of designated camping sites maintained by local managers on an ad hoc basis. WDFW will develop and apply a more formal process for siting, establishing, developing, and maintaining camping areas as needed.
2.26	Signage plans	Effective signage for public lands should convey a sense of welcome, foster safety and rule compliance, facilitate management of an area, and provide a learning opportunity for visitors. Signage development should include planning for multilingual audiences. WDFW is developing sign design standards and guidelines (see Strategic Priority 5: Education and Engagement), which will include site planning guidelines to support local managers in siting, installing, and maintaining signage at local wildlife areas, water access areas, and hatcheries.

		WDFW will develop signage plans and install signs as needed and as funding allows.



3: RULEMAKING

Goal: Regulate recreation uses of WDFW-managed lands to protect the health and safety of fish, wildlife, habitat, department personnel, neighbors, and other visitors.

WDFW-managed lands provide rich opportunities for visitors to access and enjoy diverse recreation. Rules are promulgated to protect wildlife, habitat, personnel, neighbors, visitors, and neighboring lands while preserving public access. The majority of existing rules governing access and use of WDFW-managed lands are codified under Title 220 of the Washington Administrative Code (WAC).

The majority of existing rules for managing recreation activities on WDFW-managed lands (Title 220 WAC) are broad (nonspecific) and incomplete, leading to regulatory uncertainty both internally and externally. Rulemaking at the statewide and area-specific scale is needed to clarify what activities are allowed where and when and should provide opportunities for meaningful public engagement.

RCW 77.12.210 gives the WDFW director authority to adopt rules for the operation and maintenance of WDFW-managed lands. Typical rulemaking processes for recreation-related rules include public filings, public outreach and engagement during the rule drafting process, public hearings on draft(s), revisions, and then signing of the rule by the department director followed by enactment.

Uses prioritized for statewide rulemaking include travel on undesignated roads and trails, camping, cutting standing trees, use of streambank easements, dog presence and training, and use of drones for recreation on department-managed land. Where possible and consistent with department goals, statewide rules should align with parallel rules regulating lands managed by other state land managers, such as the Washington State Department of Natural Resources and Washington State Parks.

Area-specific rulemaking processes and rules should be developed to provide greater flexibility for regulating access and uses in response to specific conditions or circumstances of a given wildlife or water access area.

Action Plan

	OBJECTIVE		DELIVERABLE	
3.1	Reduce regulatory uncertainty regarding recreation-related uses.	3.11	Undesignated roads and trails rule	Undesignated roads and trails are roads or trails that have not been designated by the department for a particular public use or uses. Examples of undesignated routes may include game trails, unsanctioned visitor-created facilities, or artifacts from a use (e.g., resource extraction) that pre-dates WDFW management or a current wildlife area management plan.
				Public use of undesignated roads and trails can damage vegetation, displace wildlife, alter hydrology, alter habitat, cause sedimentation, spread invasive species, and fragment landscapes. In consultation with tribes and other government partners, all informal roads and trails should be closed or designated for

		public use and the use of undesignated routes made illegal except for permitted dispersed uses. WDFW will propose a rule for designating routes and prohibiting the creation or use of undesignated roads and trails except for permitted use.
3.12	Camping rule	Currently, camping is allowed on department-managed land unless expressly prohibited by onsite signage. A more easily communicated, supported, and enforced approach would be to prohibit camping on department-managed lands except where expressly allowed by areaspecific rule and/or posted notice.
		WDFW also should consider shortening the current 21-day maximum allowed stay for camping. A shorter allowed period would reduce impacts on the land, better align WDFW rules with rules on other state lands and support recreational camping access for more people at preferred camping spots.
		WDFW will propose changes to WAC 220-500- 100 to 1) allow camping on department- managed land only by area-specific rule and or posted notice and 2) reduce the allowed period for camping on all or some properties.
3.13	Cutting standing trees rule	WAC 220-500-210 prohibits the removal of wood from WDFW-managed lands but does not address the cutting of standing trees on WDFW-managed lands (e.g., while camping). Cutting standing trees, limbs, and shrubs on WDFW-managed lands without permission damages wildlife habitat.
		WDFW will propose a statewide rule prohibiting the cutting of standing (dead or living) trees, limbs, and shrubs for use on WDFW-managed lands except with a department-issued permit or permissions associated with a tribal treaty right.
3.14	Streambank easement rule	WDFW owns roughly 300 streambank easements totaling at least 200 miles of stream frontage in 23 counties across the state.

			To protect the interests of landowners and visitors, use of streambank easements should be limited to uses consistent with rights conveyed in a relevant easement. WDFW will propose rules regulating public use of streambank easements on private lands consistent with the department's legal rights, including limiting use to sport fishing and pedestrian travel and specifying open/closed status.
	3.15	Dog presence and training rule	Unregulated dog presence can pose a threat to wildlife and habitat. WDFW's rules, regulations, and annual hunting pamphlet address the presence of dogs, training, and hunting with dogs on wildlife areas. These dispersed rules are incompletely documented, unclear, and difficult to understand for department staff and the public. WDFW will propose a rule change to clarify regulations of dog training and presence on WDFW-managed lands (outside of hunting with dogs).
	3.16	Unmanned aircraft systems rule	Unmanned aircraft systems (UAS), more commonly called drones, are flown as a hobby, and for photography and sport races. Use of drones over public lands is becoming more popular as the technology advances and becomes more affordable. Concerns related to UAS include disturbance to wildlife and disturbance and privacy concerns of other visitors. WDFW POL 7021 provides direction and guidance when UAS are used by department staff or contractors to monitor natural resources. However, there is no rule on recreational use of drones on/over WDFW-managed lands. WDFW should regulate the public use of UAS to be consistent with conservation and other management priorities. WDFW will propose a rule change that prohibits the launching, landing, and operation of unmanned aircraft on WDFW-managed lands except with a WDFW-issued permit.

3.2	Regulate access and use of specific wildlife areas, units, and water access areas.	3.21	Area-specific rulemaking approach	Each wildlife and water access area has unique management goals and objectives tailored to the conservation and recreation needs of the area. Some areas also need area-specific rules that address local use or conservation issues but are not necessary or appropriate for application statewide. Typically, WDFW land managers rely on very general statewide rules coupled with supplemental property-specific rules by posted signage [WAC 220-500-030(3)] for managing public use of specific wildlife areas and access areas. As the department has acquired more lands and use of departmentmanaged lands has increased and diversified, a more formal approach is needed for establishing and communicating permanent area-specific rules. The existing system is difficult for the public and enforcement to navigate. WDFW will develop and implement a
		3.22	Area-specific pack goats and sheep rule Area-specific shed antlers collecting rule	consistent and transparent process for area- specific rulemaking. Infected domestic sheep and goats pose a significant threat of transmitting disease to bighorn sheep populations where encounters occur via the use of sheep and goats as pack animals. In June 2021, the WDFW Director instituted an emergency rule under WAC 220-500-040 to address this threat by making it unlawful for any person to allow goats or sheep to be untethered or unattended where there is a
				threat of exposure to bighorn sheep herds. This emergency rule will provide the basis for permanent rulemaking. WDFW will propose a permanent rule to protect bighorn sheep herds on WDFW-managed lands from contracting Mycoplasma ovipneumoniae or other illness from domestic goats or sheep. For generations, people have enjoyed collecting shed elk antlers on WDFW-managed lands. However, early entry into elk winter

		ranges to collect shed antlers threatens the survival of wintering elk and should be regulated. In coordination with tribal partners, WDFW will propose a rule change regulating the seasonal collection of shed antlers where elk occur.
3.24	Area-specific rules migration	The WAC is the central repository of rules governing access and uses on WDFW-managed lands. There are some area-specific rules within the WAC, including WAC 220-414-040, which makes it unlawful to possess shot other than nontoxic shot in certain wildlife areas. However, many rules posted on WDFW-managed lands are not reflected in the WAC. Permanent area-specific rules currently established on department-managed lands but not included within the WAC should be migrated into the WAC to support public awareness and enforcement. WDFW will migrate permanent area-specific rules into the WAC to complement the posting of rules and update the definition of posting of area-specific rules to align with WAC 332-52-600.

4: TRAVEL MANAGEMENT

Goal: Develop a sustainable multimodal travel management program that addresses the designation, development, decommissioning, maintenance and monitoring of roads and trails on WDFW-managed lands.

Roads and trails on and across WDFW-managed lands support department management activities, including habitat restoration and fire suppression activities, game management, research, enforcement, operations and maintenance, as well as visitor access and use for recreation. Tribes also rely on roads for access to exercise treaty rights.

Recreation uses of roads include motorized and non-motorized recreation and access for hunters with disabilities. Motorized and nonmotorized trails on WDFW-managed lands also provide access to the backcountry and recreation for diverse uses, including all-terrain vehicle and motorbike riding, hiking, backpacking, bicycling, and horseback riding. There are approximately 211 miles of designated trails on WDFW-managed lands, including 117 miles of soft or "natural surface" trails designated specifically for nonmotorized recreation.

There are approximately 1,700 miles of designated roads on WDFW-managed lands, including 1,300 miles that are owned and operated by WDFW, 401 miles of road that are owned and operated by other entities (USFS, BLM, DNR, Washington State Department of Transportation, counties, irrigation districts, and private parties), and 12.4 miles of official USFS off-road vehicle recreational roads. This does not include an unknown number of user-built roads. Most roads on WDFW-managed lands that are open for motorized travel by the public also are currently available for motorized and nonmotorized recreation.

Many roads on WDFW-managed lands pre-date acquisition or management of the land by the department. Some are well located, properly constructed, and adequately maintained. Others do not meet standards for safety and have adverse impacts on the environment. These roads should be inventoried to assess their potential impacts and future utility.

Some roads and trails on WDFW-managed lands were created by people expanding recreation use and access without approval or support from the department. These informal roads and trails should be closed pending evaluation for formal designation or permanent closure. All roads and trails on WDFW-managed lands should be closed for non-administrative functions unless officially designated for public use.

Although all wildlife and habitat are not affected to the same degree and some travel networks are less damaging than others, road and trail presence and use are generally associated with negative effects for terrestrial and aquatic ecosystems. Associated impacts include habitat damage during construction, habitat fragmentation, increased human use and associated impacts (e.g., litter, human waste), spread of invasive species, sedimentation, and other water quality issues, as well as disturbance of wildlife and mortality of animals struck and killed by motorized vehicles.

Wildlife and habitat impact from travel networks should be mitigated by limiting linear miles and network densities to what is needed for providing access for employees, partners, contractors, and the public. Travel network uses and conditions should be regularly assessed as part of local and regional wildlife area and access area plan development and updates.

USFS and other public land managers have developed road and trail classification systems to categorize and inventory routes by use and maintenance level. WDFW should borrow from examples at the federal and state levels to bring a more intentional, consistent process to managing travel networks locally and as a statewide system.

Action Plan

	ODJECTIVE -		DELIVERABLE.	
4.1	OBJECTIVE	1 1 1	DELIVERABLE	To will the ancies are stall in section of
4.1	Establish clear	4.11	Road .	To mitigate environmental impacts and
	guidance for		management	provide essential access and recreation, roads
	managing travel		policy and	on WDFW-managed lands should be
	networks on WDFW-		procedures	proactively managed and maintained.
	managed lands.			With support and input from key partners and stakeholders, WDFW will develop a road management policy and set of procedures that establish a vision and goals for road management on WDFW-managed lands; define key terms and core concepts, including policy that roads are closed unless posted open for visitor use; identify strategies for minimizing impacts to fish, wildlife, habitat and tribal resources, including impact monitoring, impact mitigation and road abandonment; provide definitions for road maintenance levels and associated attributes; develop a process for establishing and implementing road management objectives and maintenance levels for roads under WDFW management; provide guidance for establishing travel management areas; demonstrate a commitment to community engagement and outreach in the roads planning process and the temporary or permanent closure of designated roads; provide up-to-date public information, e.g., downloadable maps and other online information, to support accessing travel networks; and updated guidance for establishing cooperative road management area agreements.

⁷ The USDA Forest Service classifies maintenance of National Forest System roads by five levels: 1, 2, 3, 4, and 5. Maintenance level 1 roads are closed to motor vehicle use. Maintenance level 2 roads are maintained for high-clearance vehicles. Maintenance level 3, 4, and 5 roads are maintained for passage by standard passenger cars during the normal season of use. (USDA Forest Service, 2012)

		4.12	Trail management policy and procedures	Nonmotorized and motorized trail ⁸ uses continue to grow in popularity necessitating a more proactive approach to designating, developing, and managing trails. With support and input from key partners and stakeholders, WDFW will establish a trails policy and associated procedures to guide the statewide management and development of recreational trails on WDFW-managed lands that establishes a vision and goals for recreational trail management on WDFW-managed lands; outlines strategies for minimizing impacts to fish, wildlife, habitat and tribal resources; sets trail classifications and maintenance goals for each classification;
4.2	Inventory and assess the uses and	4.21	Inventory of roads and	and tribal resources; sets trail classifications and maintenance goals for each classification; outlines a recreational trails planning process and a process for closing undesignated trails; outlines a process for establishing trail management objectives and maintenance levels for each trail under WDFW management; commits to community engagement and outreach in the trails planning and maintenance process, as well as the temporary or permanent closure of designated trails; and designates personnel responsible for implementation of the policy. In writing this policy and procedures, WDFW should review examples of successful recreational trails policies used by other land managers and seek to develop and align agency policies where possible with other recreational trail policies in the state, including the Recreational Trails Policy established by the Department of Natural Resources, 2015). A complete and centralized inventory of travel network facilities will support their
	condition of travel routes and networks.		trails	management as well as communication with partners and the public about their designated use and availability.

⁸ Trail is defined as "a linear route managed for human-powered, stock, or OHV forms of transportation or for historic or heritage values" (USDA Forest Service, 2007).

				WDFW will develop a complete inventory of travel network facilities, mapping designated and undesignated roads; designated and undesignated trails; ADA-accessible trails; regulatory and wayfinding signs.
		4.22	Maintenance tracking system	Currently, maintenance of travel networks is ad hoc as funding allows and decentralized across wildlife areas and regions. More consistent centralized maintenance tracking and scheduling will increase efficiency and assist with maintenance prioritization and funding efforts to support travel networks statewide.
				WDFW will develop a central database to support the maintenance of travel networks that includes up-to-date travel network facility use, conditions and closures; maintenance schedules to support maintenance goals established under Road Management and Recreational Trails policies; and an impact monitoring protocol for tracking impacts of networks on natural and cultural resources.
4.4	Monitor and manage travel networks.	4.41	Closed illegal routes	Some roads and trails on WDFW-managed lands were created by people expanding recreation use and access without approval or support from the department.
				Illegally created roads and trails will be closed pending evaluation for formal designation or permanent closure. All roads and trails on WDFW-managed lands will be closed by rule for public access unless officially designated and posted for public use.
		4.42	Managed networks	Travel networks should be actively managed to comply with rules and policies and support achievement of conservation and recreation management goals established during wildlife area and water access area planning processes.
				As needed, WDFW will monitor the impacts of travel networks on habitat and wildlife (see Data Development and Management); maintain, reconstruct or add routes and implement maintenance schedules; secure funding and capacity for maintaining,

	reconstructing or adding routes and implementing maintenance schedules; temporarily or permanently close routes; abandon and/or rehabilitate problematic or unneeded routes; work with volunteers and partners to implement TMA plans; post routes open to public access; and engage the public regarding route maintenance and closures.
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5: EDUCATION AND ENGAGEMENT

Goal: Engage targeted populations in planning and managing recreation and encourage the development of a stewardship ethic in all visitors to WDFW-managed lands.

WDFW is committed to reaching and serving diverse communities, welcoming them to explore and enjoy their public lands, and inviting them to join WDFW in shared stewardship.

Through education and engagement, WDFW should encourage the development of a stewardship ethic in visitors to WDFW lands. According to the Association of Fish and Wildlife Agencies, "A stewardship ethic is at work when people feel an obligation to consider, not only their own personal well-being, but also that of their surroundings and human society as a whole" (Association of Fish and Wildlife Agencies, 2008).

A stewardship ethic often begins with a positive connection to a special place or experience. During the COVID pandemic, many people visited WDFW-managed lands. First-time hunters and anglers joined the rich traditions of hunting, fishing, and nature viewing on Washington state lands. New hikers, bikers, and climbers explored wildlife areas and swimmers and boaters visited water access areas in droves.

Following an initial closure to protect public safety, WDFW and other land managers welcomed the public to visit and enjoy their public lands during the pandemic. Unfortunately, the volume and inexperience of many visitors had a devastating impact on these places. At the height of the pandemic rush to get outside, the *Seattle Times* wrote: "Recreation is turning into 'wreckreation,' as COVID-cabin-fevered hikers, campers and day-trippers venture out and damage public lands all over the state — including, it seems, sparking wildfires with careless or clueless behavior (Mapes, 2020)."

The recreation community along with conservationists and public land managers provided a strong positive response to the "wreckreation" brought by the COVID-19 pandemic. Two national efforts, the Responsible Recreation Campaign and the Recreate Responsibly Coalition (RRC), were born of a need to educate new recreationists about how to enjoy the outdoors safely and responsibly. In Washington, WDFW has been an active member of the Recreate Responsibly Coalition, which develops messaging and toolkits to support land managers and recreation groups in promoting a stewardship ethic within visitors to Washington's public lands.

WDFW should continue to consult with tribes, engage tribe-affiliated groups like the Northwest Indian Fisheries Commission recreation working group, and support and participate in coalitions like the RRC that engage partners in educating new and existing users to recreate safely and responsibly on public lands. WDFW also should focus attention on welcoming and serving more diverse audiences, making sure all visitors to WDFW-managed lands have the information they need to enjoy these precious places, and inviting people to participate in their stewardship.

Action Plan

	OBJECTIVE		DELIVERABLE	
5.1	Engage federally	5.11	Coordination and	Consistent with Executive Order 21-02
	recognized tribes in		Consultation	and WDFW Policy 5007, WDFW will
	recreation planning			coordinate and consult with
	and program			Washington's federally recognized tribes
	development.			on the development and implementation

				of the 10-year Recreation Strategy for WDFW-managed lands. WDFW also will seek opportunities to collaborate with tribes and other experts in developing systems and programs for measuring, monitoring, and mitigating the impacts of outdoor recreation on tribally significant cultural and natural resources
5.2	Engage underrepresented communities in recreation planning and program development.	5.21	Listening sessions	Most visitors to WDFW-managed lands are white males over the age of 35.9 WDFW values all visitors, but these demographics do not reflect the rich diversity of the Washington state population. A series of facilitated listening sessions will explore this discrepancy and opportunities to make WDFW-managed lands feel safer and more welcoming for diverse visitors of all ages and backgrounds. WDFW will engage an external facilitator to support recruitment and facilitate discussions with diverse groups of people interested in outdoor recreation in Washington.
		5.22	Trusted Advocates program	Successfully used in cities across the U.S., the Trusted Advocate engagement model contracts with a member of a specific community to support engagement of their community in a public process. Trusted Advocates usually have deep connections to their communities as organizers and/or advocates. To better serve diverse Washingtonians, WDFW should develop and evaluate recreation programs in collaboration with underrepresented communities. Trusted advocates embedded in their communities will be contracted as

 $^{^9}$ 90% of WDFW visitors to WDFW-managed lands are male, 90% are over the age of 35, and 91% are white (Northwest Research Group & C+C, 2018).

				community liaisons in developing and evaluating recreation investments and programs on WDFW-managed lands. WDFW will develop and implement a trusted advocates program to contract community leaders from LGBTQ+ and communities of color, seniors, youth, and people with disabilities. Trusted advocate roles may include participating in program development work groups, advising on message development and outreach, and conducting outreach.
5.3	Recruit, retain, and reactivate diverse hunters and anglers.	5.31	Statewide R3 plan	Even as other outdoor recreation activities have increased, hunting and fishing continue to be a popular and treasured use for WDFW-managed lands. However, statewide participation in hunting and fishing is declining. Statewide declines in hunting and fishing pose a significant risk to department funding both from license sales and Pittman-Robertson and Dingell-Johnson funds. WDFW must be proactive and creative in its renewed efforts to recruit, retain, and re-engage (R3) hunters and anglers from diverse communities in Washington.
				WDFW will develop and implement an R3 Plan that identifies priority goals, strategies, and tactics to support the recruitment, retention, and reactivation of hunters and anglers. This will include efforts to preserve and improve opportunities for hunting and fishing on WDFW-managed lands.
5.4	Create a statewide interpretation program.	5.41	Interpretive framework	The National Association for Interpretation defines interpretation as "a mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource." An interpretive program would help tell the stories of WDFW-

managed lands and connect real and virtual visitors to WDFW work on the landscape. WDFW will collaborate with tribal governments and other partners to develop an interpretive framework that establishes a vision and desired outcomes (pedagogy) for interpretation, as well as key audiences, audience interests and values; outlines and prioritizes significant stories associated with WDFW-managed lands and tribal resources; organizes an interpretive planning process for local education and storytelling. 5.5 Engage volunteers in 5.51 **Ambassador** Volunteers in Washington and across the program United States participate in ambassador supporting the programs to give back to the public lands recreation needs of they love. Ambassadors welcome visitors to WDFWvisitors, provide wayfinding and managed lands. recreation tips, and engage recreationists around safe and ethical use of public lands. A volunteer ambassador program managed by WDFW or a partner organization(s) would provide a rich service opportunity, promote safe and responsible recreation, and improve the experience of visitors to WDFWmanaged lands. Program locations may include trailheads, boat launches, hatcheries, shooting ranges, and other locations where the level of visitation and need for public information is greatest. WDFW will develop and pilot an ambassador program modeled after similar successful programs, including the Trailhead Ambassador Program at the Mountains to Sound Greenway (Mountains to Sound Greenway, 2021). Existing WDFW programs involving volunteers or service hours, such as the Wildlife Education Corps at Oak Creek Visitors Center, Adopt an Access /

				Wildlife Area, and Master Hunter Permit Programs, also provide good examples of volunteer engagement and could be leveraged to support this action.
		5.52	Citizen/Community science	Citizen/Community science can be defined as "the practice of public participation and collaboration in scientific research to increase scientific knowledge. Through citizen/community science, people share and contribute to data monitoring and collection programs" (National Geographic Society, 2012). WDFW should build its citizen/community science program to expand the department's capacity for data collection and engage recreationists in fun and exciting wildlife conservation research.
				WDFW should expand on the successes of its recent citizen/community science projects. Recent efforts have included asking hikers to collect and share data about American pikas to support research about the impacts of climate change on alpine habitats and engaging hunters in mapping sightings of elk with symptoms of hoof disease.
				WDFW will continue and expand efforts to educate and engage recreation groups and individuals on where, why, and how to collect and share data to support wildlife and habitat conservation efforts.
5.6	Equip managers to manage local user conflicts.	5.61	Conflict management process	Addressing an emergent conflict early and locally at its source can prevent a conflict from escalating unnecessarily. Typical recreation conflicts arising on WDFW-managed lands involve disputes between or among individuals or groups wishing to pursue similar or competing uses in close proximity of each other. Local WDFW land managers need more tools and support for managing and facilitating conflict that prevents unnecessary escalation and leads to situation improvement.

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				WDFW will develop and implement a statewide conflict management process that builds capacity for addressing local conflicts; addresses recreation-related conflict in an open and transparent way; is consistent across WDFW-managed lands; encourages social learning.
5.7	Educate visitors about how and where to recreate responsibly.	5.71	Message development	Limited public awareness about outdoor recreation's cumulative impacts impedes effective management (Thomas & Reed, 2019). For example, if the public doesn't understand why regulations and restrictions are in place, they are more likely to ignore or protest them.
				To manage visitor expectations, limit impacts to habitat and wildlife, and reduce user conflicts, it is important to share with the public how WDFW provides recreation within a spectrum of recreation opportunities available on public and private lands in Washington, and to connect recreationists with resources promoting responsible recreation.
				WDFW will work with tribal governments, internal, and external stakeholders to develop a message framework and strategy to communicate opportunities for recreation on WDFW-managed lands and educate visitors how to recreate safely and responsibly.
		5.72	Sign design standards and guidelines	Effective signage for public lands should convey a sense of welcome, foster safety, facilitate management of an area, and provide a learning opportunity for visitors. Current signage on WDFW-managed lands lacks conformity and continuity.
				WDFW will develop and implement design standards and guidelines that describe different types of signs and locations where they are used; provide general design guidelines and standards that apply to certain types of signs,

		including material, installation, and siting requirements; establishes a signage planning, procurement, and maintenance program.
5.73	Maps	Public maps are an efficient means for conveying important information about public lands, including available facilities and designated recreation areas, as well as protected areas with limited access. The public should be equipped with upto-date information about where they can recreate on WDFW-managed lands and what areas are restricted to protect natural and cultural resources. Maps should be developed by WDFW or by a vendor using WDFW-managed data to improve the visitor experience of WDFW-managed lands.
		WDFW will develop or contract the development of a downloadable map interface for public use in wayfinding on and around WDFW-managed lands.
5.74	Website	The WDFW website is a critical source of public information on a wide variety of subjects ranging from species and habitats to licensing and permits. The WDFW website should provide up-to-date information about where the public can pursue a variety of recreation opportunities on WDFW-managed lands and how to recreate responsibly.
		WDFW will maintain the department website with accessible up-to-date information about what recreation areas are open or closed, what recreation opportunities are allowed on WDFW-managed lands, and how to recreate safely and responsibly.

6: CAPACITY AND FUNDING

Goal: Develop the tools, workforce, and sustainable funding to deliver on the vision of the 10-year Recreation Strategy for WDFW-managed Lands.

The WDFW Statewide Recreation Strategy is ambitious both in its scope and intention to change how WDFW plans and manages recreation. It expands from a primary focus on hunting and fishing to a more holistic approach that continues to invest in these activities but also welcomes and invests in other recreation uses that reflect the shifting values and interests of Washington's growing and diversifying population. It also represents a change from a primarily passive and reactive approach to managing visitor demand and access to WDFW-managed lands, to a proactive approach that actively plans and manages for recreation use while monitoring and addressing emergent recreation impacts.

To meet the ambition and achieve the vision of the Recreation Strategy will require an expansion of capacity with bold investments in the systems, partnerships, and personnel needed to carry the work forward. Some investments are needed in centralized systems and capacity for coordinating efforts statewide, but more capacity and investment is needed in WDFW's six regions. WDFW entrusts regional personnel with the stewardship of wildlife and water access areas and primary responsibility for welcoming visitors to the lands in their care. WDFW should equip regional personnel with the tools, staffing, and expertise they need to warmly welcome visitors while also protecting and restoring habitat, fish, and wildlife.

Quality fish and wildlife-related recreation relies on intact ecosystems. The existing operations and maintenance gap for stewardship of WDFW-managed lands is significant. This gap is \$30 million per fiscal year based on an estimated average of \$52 per acre management cost for WDFW-managed lands (Merg, 2018). WDFW is working with the state legislature and other funding partners, such as the Bonneville Power Administration, to address this significant need.

In addition to the \$30 million needed for stewardship, WDFW should invest in staffing and other management costs specific to planning, providing, managing, and monitoring recreation, especially in the face of increasing use. WDFW will address the underlying operations and maintenance funding gap in phases, while at the same time increasing capacity to staff and fund this recreation strategy.

WDFW must evolve in its planning and management of recreation on WDFW-managed lands. This evolution will require learning from our peers, engaging with diverse partners, testing new approaches, and ramping up department capacity over the course of the next decade and beyond.

Action Plan

	OBJECTIVE		DELIVERABLE	
6.1	Increase statewide capacity for recreation planning and management.	6.11	Partnerships	Managing recreation to provide quality opportunities while protecting natural, cultural and tribal resources transcends geographic and organizational boundaries. The quality of recreation and health of fish, wildlife and habitat on WDFW-managed lands requires good planning and management across public and private lands.

		WDFW will expand working relationships with public, private, nonprofit and tribal partners to participate in recreation planning and management across the state. Early priority will be placed on partnerships within State government and with tribal governments. Collaboration and pooling resources will benefit lands across the state.
6.12	Project managers and specialists	To achieve the vision of the recreation strategy, staffing allocations will be needed both centrally and within the department's six administrative regions. Duty stations will vary based on project focus. WDFW will need project managers and technical specialists to support in the funding, development, and delivery of recreation rules, policies, plans, and programs. WDFW will expand staffing capacity for
		developing, implementing, and evaluating recreation programs, projects, and facilities, and for monitoring the condition of facilities and impacts on natural and cultural resources. Needed functions will include data development and management; policy development and rulemaking; project and grant management; funding and budget management; public engagement and facilitation; internal and external communications; volunteer and partnership coordination.
6.13	Master contracts	Washington state has a deep pool of technical expertise and skills for developing and maintaining recreation infrastructure. WDFW has occasionally contracted with nonprofit and private sector partners to develop and maintain facilities on WDFW-managed lands.
		Establishing master contracts with partner organizations would build department capacity and expedite contracting external expertise and crews for delivering local recreation projects such as trail development or decommissioning, on WDFW-managed lands.
		WDFW will develop and execute master contracts with external partners for delivering

				local projects. Projects may include program development (e.g., interpretive program framework); trail development and maintenance; road maintenance and decommissioning.
		6.14	Data systems	New and expanded data systems are needed to support recreation planning and management on WDFW-managed lands. WDFW will invest in data planning 10, development, and management to support tracking and analysis of visitor use and demand data; monitoring and reporting recreation impacts on wildlife and habitat; suitability analysis and mapping for recreation planning; designating and maintaining recreation facilities, including roads and trails; engaging visitors and managing customer relations; reporting to lawmakers, partners, and the public
6.2	Increase regional capacity for recreation planning and management.	6.21	Regional planners	Recreation planning capacity is needed in each of WDFW's six regions to support development of regional, local, and area-specific plans. WDFW will recruit, hire, and equip regional recreation planners to lead regional and local planning and support policy and program research and data collection for area and statewide initiatives, including rulemaking.
		6.22	Law enforcement officers	Enforcement capacity at WDFW is limited due to staffing shortages. While the acres of land managed by the department and the number of visitors has increased, enforcement personnel staffing levels has remained flat. Currently there are 136 filled enforcement positions at WDFW, the same number as 25 years ago, and individual law enforcement officers are forced to cover large service areas. Being spread thin affects the department's ability to fulfill its obligations to enforce laws and regulations across the whole spectrum of

¹⁰ Data planning is defined as "the projection of expected future need for data, with specifications on data sources, data collection and storage, data processing and presentation, data distribution, and data security (IGI Global, 2021)."

				public safety and resource protection challenges.
				WDFW will continue its efforts to increase enforcement personnel capacity by recruiting and training law enforcement officers. The agency also will explore hiring or contracting public interaction staff to greet visitors and assist law enforcement officers with observing and reporting improper use, damage and illegal activity.
		6.23	Facilitation capacity and training	Managing conflicts among individuals or groups with competing interests and perspectives can be stressful and/or intimidating for local managers, especially if they are not well equipped to facilitate dialogue among the affected stakeholders.
				WDFW should expand its capacity for managing conflict by supplementing regional staff facilitation skills via training and centralized facilitation support that can be deployed as needed.
				WDFW will equip local managers with the skills and confidence to manage emergent local recreation-related conflicts by providing training and centralized support and coordination.
6.3	Develop sustainable funding to support WDFW Statewide Recreation Strategy implementation.	6.31	Funding	An estimated \$40 – 60 million will be needed to support implementation of the WDFW Statewide Recreation Strategy over the next 10 years. This includes one-time investments in systems and program development (\$1 -5 million), plus increased and sustained capacity for program staffing/management (\$5-10 million/year) and facilities operations and maintenance (\$5-10 million/year).
				Additional funding of \$20 million will be needed for one-time capital investments, including signage and facility improvements.
				WDFW will secure funding for the implementation of the WDFW Statewide Recreation Strategy. Sources of new and expanded funding may include fees and permits; state appropriations; federal grants.

Funding need estimates will be adjusted over
time in response to available capacity and
strategy updates.



NEAR TERM ACTIONS

The WDFW Statewide Recreation Strategy is a 10-year department commitment with long- and near-term priorities. The following actions are prioritized for implementation in the next 2 to 3 years as funding and capacity allow. These will provide a solid foundation for further implementation of the strategy and management of recreation on WDFW-managed lands in the decades ahead.

Make WDFW lands more welcoming

WDFW lands are the people's lands, and all people are welcome to visit and enjoy them. When visitors arrive, they should be equipped with the information needed for a positive experience and knowledge of how to protect a place and the habitat and species that live there.

Objective	
2.26	Develop and implement sign design standards and guidelines.
5.21	Host listening sessions to identify barriers to access for underrepresented groups.
5.71	Message development to communicate opportunities for recreation and educate
	visitors how to recreate safely and responsibly.
5.74	Improve WDFW website to provide timely and useful recreation access information.

Collect and analyze data

To improve recreation planning and management, the department first needs to collect and manage better data as a foundation for making sound, science-based planning and management decisions that support recreation and protect natural, cultural, and tribal resources.

Objective	
1.11	Track the number of visitors to WDFW-managed lands.
1.21	Inventory and assess recreation-related facilities.
1.22	Develop impact monitoring data and systems.
4.21	Inventory of travel networks

Curtail illegal activity

Illegal activity diminishes the quality of recreation for other visitors, damages or even destroys habitat, and can force the temporary or permanent closure of areas to public access. Curtailing illegal activity is a top priority to help ensure the sustainability of fish and wildlife-related recreation for current and future generations.

Action Item	
3.24	Migrate area-specific rules into the Washington Administrative Code.
4.41	Stop the creation and use of illegal roads and trails.
6.22	Increase law enforcement in regions.

Learn by doing

WDFW will develop new planning approaches to improve the management of recreation. Prior to scaling these approaches statewide, the department will test them in areas with the highest need for immediate planning. Pilot approaches will be fully evaluated for their efficacy and improved as needed for application in other areas.

Action Item	
2.11	Pilot land classification system (Locations TBD).
2.21	Pilot access area planning (WDFW Region 4, North Puget Sound).
2.22	Pilot recreation planning module (WDFW Region 3, Methow Wildlife Area).

Ramp up capacity

The following near-term investments will provide capacity for both near- and long-term success in planning and managing recreation on WDFW-managed lands.

Action Item	
5.61	Equip local managers with a conflict management process.
6.11	Strengthen collaborative relationships with state and tribal government partners.
6.12	Increase rulemaking capacity.
6.14	Build capacity for collecting, managing and analyzing data.
6.21	Increase capacity for regional planning.
6.32	Fill the operations and maintenance gap at water access areas.

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