



**City of McCall
City Council**

**AGENDA
Special Meeting
April 22, 2022 at 9:00 AM
Forest Service
605 Mission Street
McCall, ID
AND MS TEAMS Virtual**

ANNOUNCEMENT:

Due to McCall's commitment to stay healthy in response to the COVID-19 Emergency and ensuring that the City's Business continues, this will be both an in person and virtual meeting. The Forest Service 6-foot social distancing Occupancy Capacity is 35. The Council Members and staff who are anticipated to be in attendance is 30. The first 5 persons who appear will be allowed to be present in the meeting location. **Social distancing and masking will be enforced.** All other persons may be in attendance virtually. Any member of the public can join and listen only to the meeting at 5:30 p.m. by calling in as follows:

Dial 208-634-8900 when asked for the Conference ID enter: 827 785 686#

Or you may watch live by clicking this link: <https://youtu.be/2JNJjFw1h8w>

OPEN SESSION

Roll Call

WORK SESSION

AB 22-101 Valley County Waterways Management Plan Update

Impact Area Boundary Adjustment Discussion

ADJOURN

American with Disabilities Act Notice: The City Council Meeting room is accessible to persons with disabilities. If you need assistance, please contact City Hall at 634-7142 at least 48 hours prior to the meeting.

**McCALL CITY COUNCIL
AGENDA BILL**

216 East Park Street
McCall, Idaho 83638

Number AB 22-101
Meeting Date April 22, 2022

AGENDA ITEM INFORMATION

| | | | | |
|---|------|-----------------------------|-----------------|--------------------------------|
| SUBJECT: <i>Joint Meeting on Valley County Waterways Management Plan</i> <i>McCall Area Impact Area Adjustment</i> | | <i>Department Approvals</i> | <i>Initials</i> | <i>Originator or Supporter</i> |
| | | Mayor / Council | | |
| | | City Manager | ABS | |
| | | Clerk | | |
| | | Treasurer | | |
| | | Community Development | MG | |
| | | Police Department | | |
| | | Public Works | | |
| | | Golf Course | | |
| | | Parks and Recreation | | |
| COST IMPACT: | n/a | Airport | | |
| FUNDING SOURCE: | n/a | Library | | |
| TIMELINE: | ASAP | Information Systems | | |
| | | Grant Coordinator | | |

SUMMARY STATEMENT:

The majority of this joint meeting (9-10:30 am) is to provide an update on the regional planning effort to develop a Valley County Waterways Management Plan. Representatives from the County, cities, and other agencies will be present to learn more about the findings to date and upcoming next steps.

The last 30 minutes will focus on the McCall Area Impact Area and the potential for adjusting the boundary per the adopted 2018 McCall Area Comprehensive Plan. The process and timeline for the adjustment will be presented and there will be an opportunity for the City and County to discuss the pros and cons of this action and provide direction.

RECOMMENDED ACTION:

1. Valley County Waterways Management Plan – info only
2. McCall Area Impact Area Adjustment- Discussion and provide direction

RECORD OF COUNCIL ACTION

| MEETING DATE | ACTION |
|---------------------|---------------|
| | |
| | |



Waterways Management Plan

*A Sustainable and Adaptable Plan –
Preserving What We Love*

Current Trends Report

Draft | April 2022

| | |
|---|----|
| Introduction | 2 |
| Purpose of the Current Trends | 3 |
| Waterways Framework | 3 |
| Data Overview and Gaps | 3 |
| Waterways Overview | 4 |
| Recreation | 5 |
| Why Does It Matter | 5 |
| Management Guidance | 6 |
| Growth in Recreation Activities | 6 |
| Economic Impact | 7 |
| Motorized Boating Impact | 7 |
| Recreation Demand | 8 |
| Land Use | 9 |
| Why Does it Matter | 9 |
| Management Guidance | 9 |
| Existing Land Use Conditions | 10 |
| Land Use Impacts on the Waterways | 13 |
| Environmental Resources | 15 |
| Why Does It Matter | 15 |
| Management Guidance | 15 |
| Environmental Concerns | 15 |
| Data Summary | 18 |

Introduction

Valley County is a recreation paradise located in west central Idaho that offers numerous types of outdoor activities. Uncertainty exists about the future of some public lands, concerns from residents, new lake developments, fluctuating water quality, soil erosion, recreation leases, changing recreational trends and technology, and recent regulations. The community's resolve has been strengthened to create a common-sense decision-making structure for the future management of the county's waterways that represents strong Idaho values.

This Valley County Waterways Management Plan addresses recreation opportunities and management at Lake Cascade, Payette Lake, Upper Payette Lake, Warm Lake, alpine lakes, and North Fork of the Payette River (collectively referred to in this plan as Waterways). Water plays a very important role in the quality of life and economic development opportunities for residents, second homeowners, users, and businesses in Valley County.



Purpose of the Current Trends

Based on the best available data, this Current Trends Report focuses on identifying trends that will influence the provision of recreational amenities and sustainable resource management. This Report includes an overview of baseline data for the area, qualitative understanding of the unique issues and challenges that affect the area, and indicators of changes in use.

The purpose of this Report is to:

- Evaluate relevant resources, environmental, ecological, social, land use, and economic data and information;
- Provide a narrative necessary for public support and to provide rigor to plan recommendations;
- Synthesize current management direction and identify needs for changes in current management practices; and
- Serve as the basis for the waterway vision, desired character, and recommendations.

Waterways Framework

Maintaining Valley County's pristine natural resources that are the sources of clean drinking water and attractive recreation spaces is a high priority and value of Valley County residents and visitors. The tourism economy of Valley County and its cities depends on its waterways. A key source of pride for locals, these waterways also serve a growing population both recreationally and through provision of drinking water. Treasure Valley alone is expected to surpass 1 million people in the next 20 years, demonstrating that resources and visitation need to be managed now. A framework will allow the community to adjust and preserve what locals and visitors cherish.



Three frameworks have been established to organize the data highlights in this Report – recreation, land use, and environmental resources. However, none of these topics exist as a standalone component. They are interrelated with impacts and benefits to each other. Quality of life is intricately tied to natural landscapes and recreation, and the long-term future depends on the stewardship of water, energy, sensitive lands, and air quality. A critical outcome of this plan will be the ability to balance the protection of water resources with economic development objectives.

Data Overview and Gaps

The purpose of this Report is to provide a high-level summary of conditions for the three frameworks. Water quality continues to be monitored at varying degrees based on local, state, and federal funding and requirements. Additional information can be found within associated reports, as listed in the references section. Data should be collected for all of the waterbodies to monitor trends in water quality.

Waterways Overview

Valley County has a diverse array of waterway resources ranging from high-activity, motorized use of reservoirs to smaller, backcountry destinations, and esteemed river systems. Valley County's waterways offer fishing, swimming, sailing, kayaking, powerboating, wakeboarding, jet-skiing, canoeing, hiking, camping, and other recreational opportunities that contribute to the economic vibrancy and quality of life associated with living in a mountain community.

The County is mostly a high and rugged area with the Boise, West, and Salmon River Mountains as the principal mountain ranges. Valley County encompasses many streams, rivers, lakes, and reservoirs and their associated riparian and upland vegetation communities. Of the 2,354,048 acres of land in Valley County, 2,147,983 acres are under Federal, State, or County management. The remaining 206,065 acres (8.7%) are privately owned (Valley County 2018). Eighty-eight percent of Valley County is within portions of three National Forests: the Boise, Payette, and Salmon/Challis. Vegetation communities in Valley County are predominantly ponderosa pine forest, mixed cropland, and grassland. The vegetation along waterways and surrounding waterbodies also includes wetland and riparian species. This unique ecological region is characterized by granitic soils and extensive mountainous terrain ranging from 1,400 to 11,000 feet in elevation.

Lake Cascade

Lake Cascade is a relatively shallow man-made reservoir managed by the Bureau of Reclamation (USBR). Designated water use includes contract irrigation, power generation, fish migration augmentation flow, flood control, recreational use, and drinking water supply. There are 25 existing recreation sites at Lake Cascade, 19 of which are under USBR jurisdiction with Idaho Department of Parks and Recreation (IDPR) managing the recreation infrastructure and programming; the other six sites are under USFS Service jurisdiction.

The lake provides important aquatic and terrestrial wildlife habitat, and fishing is popular year-round. Six areas at Lake Cascade are specifically designated as Wildlife Management Areas (WMAs) and are managed for the primary purpose of benefiting wildlife. These WMAs provide protection for more than 4,000 acres of land. The overall purpose of the WMAs is to protect habitat for migratory birds and sensitive, threatened, or endangered wildlife species. The most crucial, abundant, and sensitive of these habitats are the riparian areas and wetlands. The emergent vegetation, adjacent wet meadows, swales, mudflats, and sandbars are critical as nesting, feeding, and loafing habitat for waterfowl, shorebirds, and wading birds. Several WMAs also include important habitat for bald eagles, osprey, and other raptor species. Lake Cascade State Park is designated as an Important Bird Area by the National Audubon Society.

Big Payette Lake

Big Payette Lake is a relatively deep glacial lake often referred to as the “crown jewel” of McCall because of its clear water and nearby forest landscape and it is the major attraction of the area. Big Payette Lake is important to McCall residents from a recreational and economic standpoint primarily in the summer months. It also supplies the area's potable drinking water; therefore, it is vital to preserve the water quality and shoreline.

Half of the land area surrounding Big Payette Lake is managed as part of Ponderosa State Park, which offers over 1,600 acres of natural wilderness on the peninsula in the center of the lake. Ponderosa State Park offers campsites, hiking trails, and habitat for terrestrial and aquatic wildlife. The area's abundant wildlife resources attract nature viewers and photographers throughout the year. Ponderosa State Park includes 14.3 miles of groomed Nordic ski trails ranging in difficulty

from recreational to competitive and 3.4 miles of designated snowshoe trails. All of these trails are open for hiking during the rest of the year.

The rest of Big Payette Lake is surrounded by private use, as well the City of McCall parks. Idaho Department of Lands (IDL) owns a significant amount of shoreline property in the northern portion of the lake. Many private homes have their own boat docks or other amenities on the water.

Warm Lake

Warm Lake is the largest natural lake in the Boise National Forest, and it is geothermal. There are many natural hot springs in the area. Motorized and non-motorized boating are popular activities. There is a small beach area for swimming. Fishing, hiking, birding, and wildlife viewing are also popular activities. Two lodges manage recreation along the north side of the lake through USFS leases. Valley County Ordinance restricts wake from 6:00pm to 11:00am.

North Fork Payette River

The North Fork Payette River flows approximately 113 miles south from the Salmon River Mountains to join the Payette River, which is a tributary of the Snake River. The river is popular for kayaking, whitewater rafting, fishing, birding, and wildlife viewing. A section of the river that is 16 miles above Banks is considered big-water Class V for whitewater rafting. It has served as the site of the North Fork Championship – one of the most challenging whitewater competitions in the world.

The BLM manages a recreation site on the North Fork Payette River, approximately 11 miles south of McCall. The site offers a small sandy beach, swimming, fishing, picnicking, and other sorts of nonmotorized river activities. The surrounding forest offers opportunities for birding and wildlife viewing.

Kelly's Whitewater Park opened in June 2010. It includes a short reach of the North Fork Payette that flows through the 3.4 acres of public park downstream of Cascades Reservoir. The Park offers rafting, kayaking, paddle boarding, and tubing opportunities. It also links to a 5-mile walking path along the bank of the river. The mission of the non-profit park is “to provide local children with an opportunity to learn water sports and water safety while instilling an appreciation for the river.” Lessons are available from their academy.

Alpine Lakes

There are nearly 300 alpine lakes within Valley County, most of which are only accessible via non-motorized means. They offer extraordinary backcountry experiences including camping, scenic viewing and fishing, some are stocked with trout and other species by Idaho Department of Fish and Game (IDFG).

Recreation

Why Does It Matter

It would be difficult to overstate the opportunities for outdoor recreation in Valley County in and around the waterways included in this plan. Recreationists in Valley County come from all over Idaho and other states. Local visitors primarily come from McCall, Donnelly, Cascade, and Smith's Ferry. Many out-of-state visitors come from California, Oregon, Montana, Utah, Washington, and Wyoming.

In addition to water-based forms of recreation, nearly every waterway location offers camping, hiking, wildlife viewing, birding, and biking. Some of these areas are closed or inaccessible during

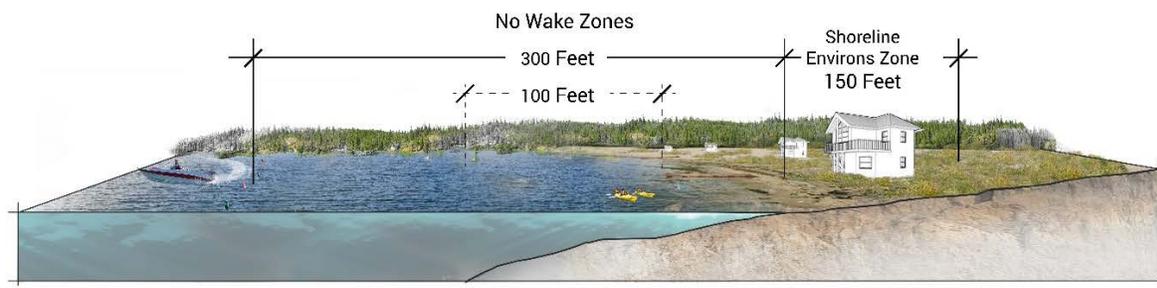
winter but others provide cross-country skiing, snowshoeing, fat biking, ice fishing, and snowmobiling trails.

In addition to recreation opportunities, the waterways and surrounding areas provide habitat for a diversity of wildlife and fish species. Fishing, wildlife viewing, and birding are enjoyed by many and habitat conservation is a priority for waterways and their surrounding areas. Although recreation activities and access to waterways should be maintained, visitors also value environmental protection. Goals and policies outlined in the McCall Area Comprehensive Plan include environmental conservation, preservation, and connectivity, in addition to sustainable recreational use of waterways and the surrounding areas.

The waterways are managed by different entities, like the County, USBR, IDPR, IDL, and the USFS. Idaho Department of Environmental Quality (IDEQ) sporadically monitors water quality. Lake Cascade State Park and Ponderosa State Park are located at Lake Cascade and Payette Lake, respectively. Both parks attract much recreational use from Valley County residents and non-residents, including out-of-state visitors. The IDFG manages fishery resources and implements fishing regulations, including stocking some fish species in certain waterbodies. The habitats present in Valley County and its waterways support a diversity of avian species seasonally and as residents. e-Bird recorded observations for January through July 2021 report a total of 205 avian species observed in Valley County and 89 birding hotspots, many of which are associated with the waterways.

Management Guidance

The 2020 Valley County Waterways Ordinance (Ordinance #20-11) stipulates operational rules, regulations, and behavioral standards, including wake zones for public waterways in Valley County. The ordinance establishes a 300-foot no-wake zone for Payette Lake, Upper Payette Lake, Lake Cascade with certain exceptions.



Growth in Recreation Activities

Growth has occurred in shoreline recreation uses devoted to camping, picnicking, swimming, and fishing. Over the past five years, both Lake Cascade and Ponderosa State Parks have witnessed a steady increase in camping and day use from both Idaho residents and out-of-state visitors. McCall's five parks located along Payette Lake draw both locals and visitors and are highly used during the peak season. Most visible is Legacy Park, which supports a myriad of shoreline activities: swimming, non-motorized boating, picnicking, volleyball, and concessions.

During the peak of the season from late June to Labor Day, onshore recreation facilities around some County Waterways are strained. In particular, parking demand is high around major river

access points, the five McCall city parks, the Lake Cascade State Park sites, and the Warm Lake beach and boat launch. The parking lot for Rotary Park adjacent to Payette Lake and the Billy Rice Swim Beach on Warm Lake fill up early on peak days. In the situation with Rotary Park, beach users have to park and walk along the highway to access the beach. The high demand for access to the County waterways and shoreline recreation is expected to continue as the region grows and continues to be a destination for visitors.

As an example, in an interview with Stef Woods, owner of Backwoods Adventures Canoe and Kayak Rentals, she related that the parking lot at the North Beach boat launch is full by 11 am, with people then parking on the road. A significant number of people using the lot are day users of the beach and are not paddlers. With the lot full, people continue up the Waterway to River Bend or over the bridge, areas which are equally impacted. Her business has stopped taking boat reservations because she cannot guarantee customers a place to park.

Economic Impact

As the tourism economy of Valley County and its cities grows, the importance of the waterways is highlighted. A key source of pride for locals, these waterways also serve a growing population from Portland to Boise. The Treasure Valley alone could pass 1 million people in the next 20 years, demonstrating that resources and visitation need to be managed now. According to the Bureau of Economic Analysis (BEA), outdoor recreation accounts for \$2.5 billion or 3 percent of Idaho’s economy and supports 36,537 jobs. The recently released Gross Domestic Product numbers by the BEA highlights the importance of boating and fishing to Idaho’s economy. Idaho continues to see a greater increase (1.2 percent growth) in the outdoor recreation industry compared to the rest of the United States (0.4 percent growth) (apps.bea.gov 2019).

| ACTIVITY | 2019 (\$ 000s) |
|-------------------------------|----------------|
| RVing | 195,316 |
| Hunting/Shooting/Trapping | 149,240 |
| Boating/Fishing | 141,438 |
| Equestrian Use | 125,925 |
| Snow Activities | 57,721 |
| Motorcycling/ATVing | 55,173 |
| Climbing/Kicking/Tent Camping | 20,917 |
| Bicycling | 11,177 |

Motorized Boating Impact

To investigate the economic importance of motorized boating in Idaho, the IDPR contracted with the Department of Economics at Boise State University to conduct a study both statewide and by county. The economic impacts from powerboating include expenditures on equipment such as boats, trailers, and related equipment, as well as from spending that occurs during powerboating trips. Residents of the State of Washington comprise the third largest group of boat owners registered in Idaho (Black et al. 2016). In 2015, the vast majority of boating trips in Idaho (352,941) were day trips and the remaining 58,618 were overnight trips.

Day Trip Powerboating Expenditures in Valley County (Residents of Valley County and Non-residents)

| Number of Day Trips | Resident Spending | Non-Resident Spending | Total Spending |
|---------------------|-------------------|-----------------------|----------------|
|---------------------|-------------------|-----------------------|----------------|

| | | | |
|--------|-------------|-------------|-------------|
| 19,510 | \$1,885,191 | \$4,419,842 | \$6,305,034 |
|--------|-------------|-------------|-------------|

Overnight Trip Powerboating Expenditures in Valley County (Residents of Valley County and Non-Residents)

| Number of Overnight Trips | Resident Spending | Non-Resident Spending | Total Spending |
|---------------------------|-------------------|-----------------------|----------------|
| 9,098 | \$300,292 | \$6,389,651 | \$6,689,943 |

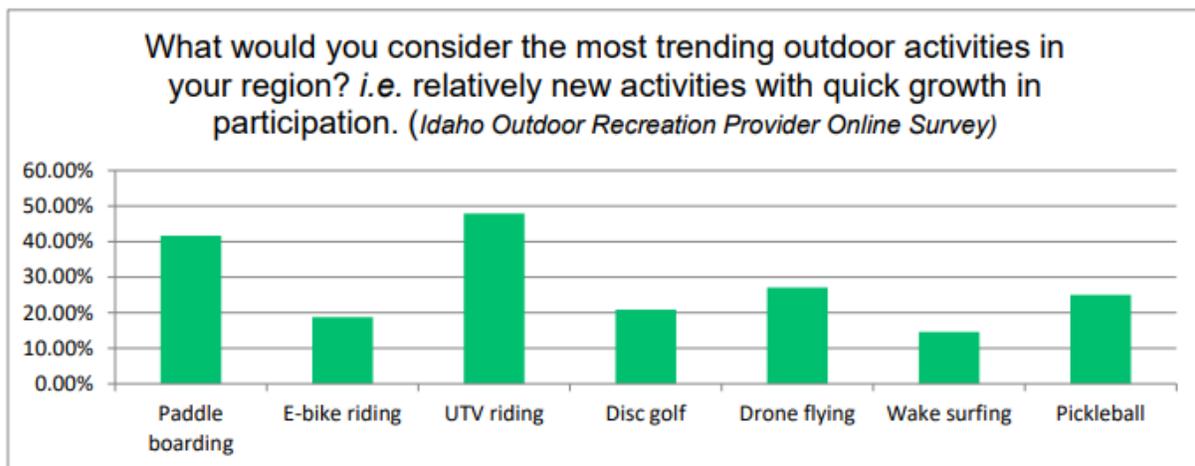
Impacts of Powerboating Activities in Valley County

| Direct Employment | Total Employment | Total Labor Income | Total Value Added | Sales |
|-------------------|------------------|--------------------|-------------------|--------------|
| 183.8 jobs | 234.8 jobs | \$8,010,230 | \$11,196,331 | \$18,664,055 |

IDPR encourages all boaters to “pay where they play” so the county where their favorite waterway is located can make improvements to boating facilities and pay marine deputy salaries to keep people safe. Many counties also use their boat registration income to leverage additional grant money for budget items such as boat ramp improvement projects, new docks, parking lot improvements, restroom upgrades, boat safety patrols, and boat safety education programs. In Valley County in 2020 boating registration revenue was \$170,569.

Recreation Demand

The Idaho Statewide Comprehensive Outdoor Recreation Plan from 2018, further highlights the importance of outdoor recreation to Idaho and summarizes demand of all types of outdoor recreation across Idaho. Through this process IDPR surveyed recreation providers, public land managers, and the general public. Focus groups with recreation providers identified paddle boarding and wake surfing as two of the top trending outdoor activities.



Stand up paddleboarding has increased significantly, due to its ease of learning and low cost to entry. Recreation providers can accommodate the activity without having to add large facilities. Many park concessionaires and retailers provide rental boards. Wake surfing has also grown in

popularity in Idaho as wake surfing technology and equipment continues to evolve and become more available. Unlike wakeboarding, surfing involves catching a ride on top of the wake created by the boats wake.

Land Use

Why Does it Matter

The manner in which land is used immediately adjacent to the Valley County waterways, as well as within the watershed, has a substantial impact on the natural and recreational value of the waterways, as well their importance for domestic water supply and irrigation. Continued growth in the region, increased demand for shoreline development in general, and increased demand for recreational access to the water is expected.

Water from Lake Cascade is used primarily for irrigation and provides groundwater recharge for the City of Cascade's wells, which are the City's domestic water sources. Other uses include hydro-electric power, salmon augmentation flow, flood control, fishing, and other recreational activities. Payette Lake is also used for irrigation, recreation, and is the City of McCall's domestic water supply. For these water-related uses, water quality is critical.

Land uses surrounding the water have an influence on the quality of the recreation experience on and adjacent to the waterways. The adequacy, location, maintenance, and safety of land-based support facilities for the recreational activities are important factors in how the waterways are enjoyed.

The waterways are valued for the inherent beauty of their natural environment and are appreciated as part of a larger natural ecosystem. Development can substantially diminish the environmental attributes of these waterways.

Management Guidance

In the State of Idaho, authority for regulating land uses is delegated to local jurisdictions: Valley County and the cities of Cascade, Donnelly, and McCall. Zoning, as an exercise of police power, is conferred in the Idaho Constitution. The Local Land Use Planning Act (ID §67-65) assigns broad powers to counties and cities for planning, zoning, and the subdivision of land. Local governments also coordinate with federal, state, and regional agencies in the review of development impacts on waterways including floodplain management, stormwater management, wetland area protection, and domestic water and septic systems.

Policy Guidance: The Valley County Comprehensive Plan recognizes waterways as "special areas" within the County. The plan directs that a specific plan be developed for the North Fork of the Payette River between Lake Cascade and Payette Lake, and for the plan to consider, among other issues, the needs of fisheries and wildlife resources. Other policies of the plan are to work in partnership with agencies on waterway improvement plans and to encourage the retention of vegetation along certain waterways.

The City of Cascade Comprehensive Plan highlights the importance of maintaining wildlife habitat, including preserving large trees along the North Fork of the Payette River and vegetation within and around wetlands. Lake Cascade is identified as a "site of interest" which, given its proximity to the City, should be promoted. The plan also directs that priority be given to protecting the water quality of Lake Cascade since the reservoir is a major source of groundwater recharge for the City's drinking water.

The City of Donnelly Comprehensive Plan describes the proximity of the City to several waterways and the importance of water quality to the City for healthy drinking water, the City's recreation economy, and environmental integrity. The impacts of storm water run-off, spring snow melt run-off, and irrigation run-off on water quality are identified as areas of concern.

The McCall Area Comprehensive Plan's vision is to protect and preserve McCall's "crown jewel", Payette Lake. The lake is a treasured asset for its natural amenities, its setting for a variety of recreational activities, the economic benefits derived from visitors, and as the source of the community's drinking water. A goal of the plan is to protect and enhance public access along Payette Lake and the Payette River through development regulations and acquisition of land for additional public access. Policies are to coordinate management of the lake with community partners, including balancing the diversity of recreational activities and protecting and improving the water quality of the lake. Optimal use of publicly-owned access points around the lake is a goal. Highest priority actions of the plan implementation are:

- Managing lakefront residential development;
- Practices and policies to protect the water quality of Payette Lake as the source of McCall's drinking water;
- Turning additional lake front properties into public spaces and enhanced lake access; and
- Exploring options for a Payette River pathway.

Regulatory Guidance: The Valley County Zoning Code requires a conditional use permit for most land uses, except agriculture, single family residences, and some public uses. All residential buildings are required to be set back at least thirty feet (30') from high water lines, and all other buildings are required to be at least one hundred feet (100') set back from high water lines. Allowable residential lot size is dependent on the type of water and sewer system available with a minimum of one acre required for a residence served by a septic system and individual well.

All conditional uses require the preparation of an Impact Report to address the potential environmental, economic, and social impacts of proposed uses and how these impacts are to be minimized or mitigated. Included are issues important to waterside development: surface water drainage and quality; disturbance of wetlands; flood-prone areas; vegetation removal; and soil, slope, and embankment disturbance and stability.

For properties within the McCall Area of City Impact, Valley County has adopted the City of McCall zoning code provisions.

For the City of McCall Impact Area, the City of McCall and Valley County have adopted an overlay district to protect the water quality of Payette Lake and the North Fork of the Payette River, as well as their aesthetic views. The Shoreline and River Environs Zone (150' from high water mark) requires design review of all properties adjacent to the waterways and establishes a fifty-foot minimum development setback from the lake and river. Within the setback, structures, patios, walls, lawns, and fences are prohibited. To protect water quality, a stormwater management plan consistent with best practices is required for all building permit applications. In addition, wildlife habitat, wetlands, and views are to be protected.

Existing Land Use Conditions

Land uses surrounding Valley County Waterways are under the jurisdiction of a variety of federal, state, and local governments, as well as privately held land.

The 86-mile shoreline of Lake Cascade is a mix of natural, agricultural, recreational, and residential land uses. Almost two dozen campgrounds and day use areas, some with boat

launches and direct access to the water, are present at Lake Cascade. Approximately 300 camping sites exist, including developed sites, group camping sites, private campgrounds, yurts, and dispersed camping spaces. Development is more concentrated on the east and north sides of the reservoir with scattered residential subdivisions along the west side. Most prominent is the Tamarack Resort. Grazing land exists to the east, north and south, as well as natural habitat, including forests and wetlands. A private air strip and golf course round out the variety of land uses. For much of the perimeter of Lake Cascade, roads separate the waterway from development. Much of the West Mountain Road adjacent to the reservoir is partially graveled and very dusty. Aside from the urban drainage from McCall and Payette lakes, the watershed of Lake Cascade is primarily forest and agricultural land. Increasingly, the trend is to convert the agricultural land to residential uses, including subdivisions and large rural residential parcels. As an example, Tamarack Resort, on state-leased land, converted forest land to a resort.

Payette Lake is anchored on the south by commercial and residential land uses in the City of McCall and public access to the lake is provided by five parks owned and operated by the City of McCall. Approximately 7.5 (34 percent) of the shoreline is adjacent to Ponderosa State Park, which is located on a peninsula that divides the lake into west and east arms, and at the North Beach, on the northern end of the lake where the Payette River flows into the lake. Residential development, historically second home cabins, surrounds much of the remainder of the 22-mile-long shoreline with a scattering of private campgrounds and one resort lodge. USFS and IDL-managed land exists along both sides of the northern perimeter of the lake, continuing north, west, and east within the lake's watershed. Contrasted with Lake Cascade, development is immediately adjacent to the lake, with the road access behind developed areas. Access through the North Beach and along the northern half of the eastern side is from gravel roads.

The land uses surrounding the North Fork of the Payette River between Lake Cascade and Payette Lake are predominately rural, characterized by grazing and crop land and residential development on large lots with more dense development within and near the cities. A fish hatchery and two sewage treatment facilities also exist along the river, including the McCall Wastewater Treatment Plant and the West Mountain Sewer and Water Plant.

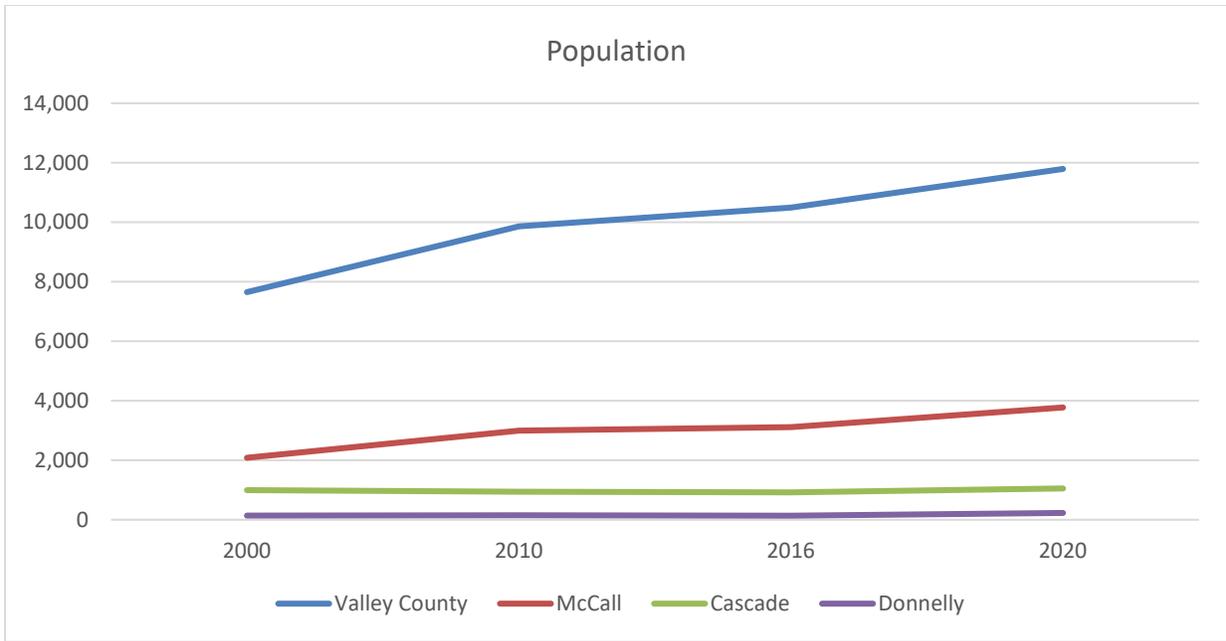
The perimeter of the 1.6-mile-long Warm Lake shoreline includes two lodges, three campgrounds, a swimming beach, and three residential cabin neighborhoods on USFS-leased land.

Other land uses within the watershed of Valley County waterways include timber harvesting, unpaved access roads, dispersed recreational use, grazing, communication facilities, and limited mining.

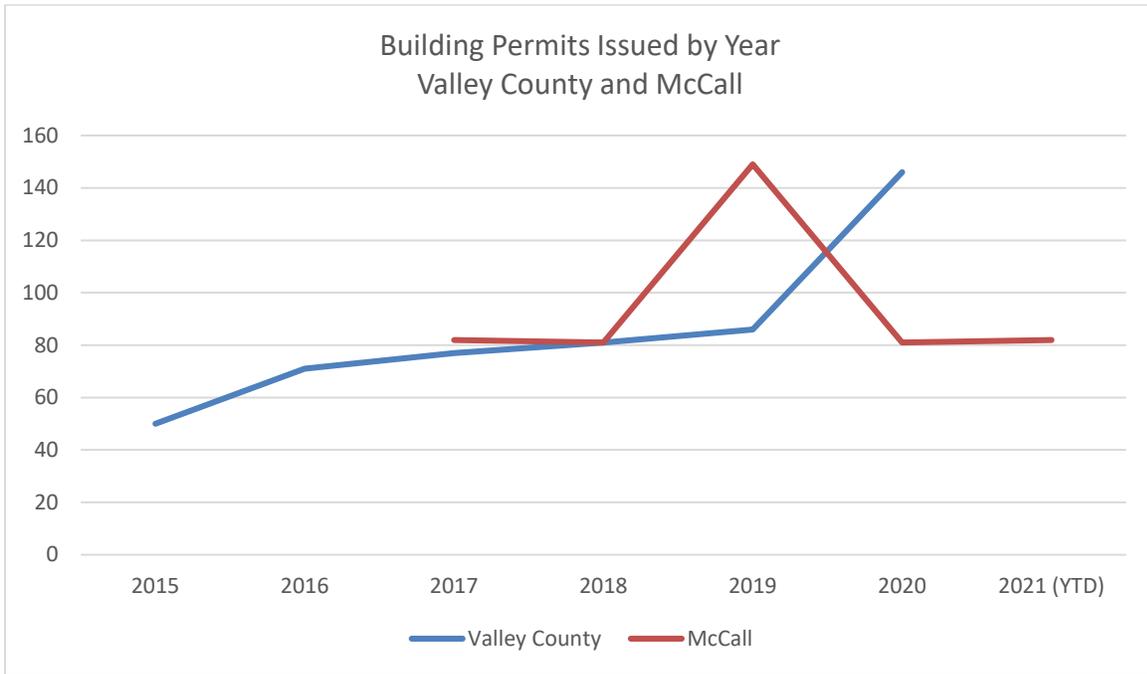
Population Growth

Valley County has witnessed substantial population growth, 24percent, between 2010 and 2020. This growth is reflected in the number of residential building permits. Both Valley County and the City of McCall have experienced significant spikes in population growth, 58 percent and 54 percent, respectively in the past few years. Over the past six years, there have been 77 shoreline permits issued in the McCall Area Shoreline and River Environs District, including an average of seven per year for new construction, mostly larger homes replacing original cabins.

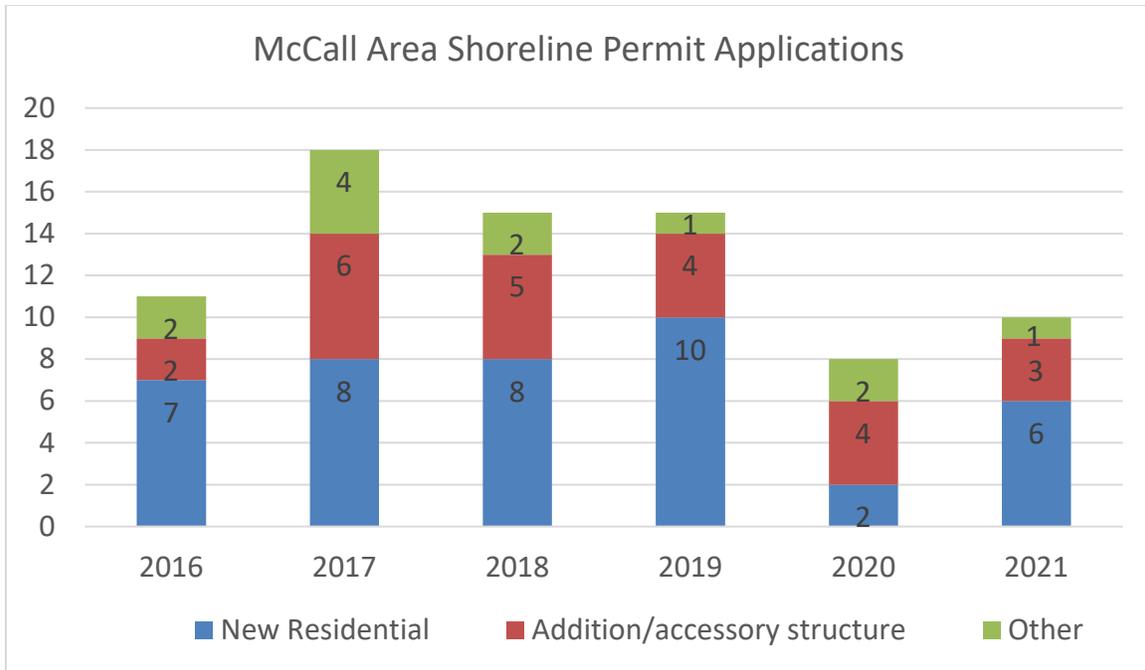




U.S. Census Bureau



Valley County and City of McCall Building Department, August 2021



City of McCall Planning and Zoning Department, August 2021

While the region has long been a magnet for visitors and second homeowners, that dynamic has increased with the development of high-end residential communities and resorts in the past ten years, including Tamarack Resort, Jug Mountain, Black Hawk along the River, and White Tail. Especially in the past two years during the COVID pandemic, an increasing number of people have moved to the area to work remotely. Research by the University of Utah, Gateway and Natural Amenity Migration Initiative has documented this growth trend, which is expected to continue (<https://www.usu.edu/gnar/research/index>).

A substantial amount of vacant, developable land remains around Lake Cascade. The Payette Lake shoreline could be further developed and redeveloped as the State Land Board divests itself of the remaining leased cottage sites and moves toward higher and best uses for some endowment lands. In the agency’s draft “Payette Endowment Land Study” (December 2020), 41 acres of endowment land were identified as transition areas over the next 20 years, including two islands in the lake and land along the east shoreline. The endowment land surrounding Payette Lake is a controversial issue at this time related to discussions between development and conservation. Another 3,500 acres of endowment land not identified for transition in the report, immediately borders the lake.

Land Use Impacts on the Waterways

As documented above, Valley County is experiencing expanding residential development, greater public use, and changing land use activities. These pressures commonly result in the mobilization and loading of nutrients (nitrates and phosphorus) to aquatic ecosystems via sediment, increased runoff, the application of fertilizers, faulty septic systems, and altered landscape (Dillon et al. 1986, Dillon et al. 1994, Carpenter 2008, Schindler 2008, 2012, Paterson et al. 2008). The cumulative effects of increased nutrient loading are typically highly detrimental to fresh-water lakes and

streams (Downing 2013, USEPA 2021). Strict adherence to good conservation practices can mitigate these negative impacts.

Water Quality: Water from Lake Cascade is used primarily for irrigation and provides groundwater recharge for the City of Cascade's wells, the City's domestic water source. Other uses include hydro-electric power, fish streamflow augmentation, and recreation activities. Payette Lake is also used for irrigation, recreation, and is the City of McCall's domestic water supply. For these water uses, water quality is critical.

The water quality of Lake Cascade and Payette Lake is compromised by run-off from the surrounding land uses. Expected growth and development will further exacerbate these impacts. Contributing factors include:

- The predominance of ground septic systems rather than central treatment facilities and the release of nitrogen and phosphorus waste if such systems are not maintained;
- Pathogen and nutrient-laden waste generated by pets and livestock;
- Sediment, pesticides, and pathogen loads from crop production and livestock grazing;
- Hydrocarbons, pesticides, nutrients, pathogens, heavy metals, and thermal pollution from urban and landscape run-off and drainage systems;
- Dust and hydrocarbons from roads;
- Sediment, salt, and oil runoff released from roads, pavement, and other impervious surfaces; and
- Sediment loads from land erosion and loss of vegetative cover caused by timber harvesting.

Recreation: Land uses surrounding the waterways influence the quality of the recreation experience on, and adjacent to, the water. The adequacy, location, maintenance, and safety of land-based support facilities for recreational activities are important in the enjoyment of the waterways. Considerations include the adequacy of:

- Public land for accessing the waterways, such as boat launch areas, day use facilities, and beaches;
- Facilities that support recreational activities, including restrooms, fish cleaning stations, signage, and refuse disposal;
- Parking and roads to meet user demand; and
- The balance of access and facilities distribution with lake congestion or choke point areas.

Environmental Integrity: The waterways are valued for the inherent beauty of their natural environment and are appreciated as part of a larger natural ecosystem. Overly developed water edges impact the waterways in the following ways:

- They create physical and visual barriers between the water and its watershed with a loss in the authenticity of the natural system.
- They cause habitat loss and fragmentation for indigenous wildlife species.
- They replace natural vegetation with buildings and fertilized landscaping.
- They modify the natural landform of the shoreline with walls and severe topographical changes.
- They introduce activity, noise, and lights to a naturally quiet and peaceful environment free from light pollution at night.
- They introduce septic systems close to the shoreline.

Environmental Resources

Why Does It Matter

The waterways in Valley County are a very valuable environmental resource, but they are only beneficial if they are clean and safe. Payette Lake, Lake Cascade, Warm Lake, and their tributary rivers and creeks provide important habitat to cold water aquatic life and support salmonid spawning. They provide immense aesthetic and mental health benefits and recreational opportunities, such as swimming and boating, which help support the local tourism economy and keep local taxes lower.

Payette Lake is the primary drinking water source for the City of McCall and the surrounding community and the primary source for agricultural irrigation supplied by all the waterways. It is also important to the regional economy and heritage resources.

However, human activities have caused adverse impacts to some waterways to the point where they can no longer provide the beneficial uses that we expect and have enjoyed in the past. Activities that occur on the land adjacent to the lakes and streams and throughout the watershed, such as livestock grazing, wastewater effluent disposal, and surface erosion all negatively affect water quality and can create hazardous and toxic conditions for humans and animals.

Management Guidance

Many of the water quality issues associated with the waterways have been brought to light as a result of assessments by the Idaho Department of Environmental Quality (IDEQ) mandated by the federal Clean Water Act (CWA). This Act requires that states and tribes restore and maintain the chemical, physical, and biological integrity of the nation's waters. Section 303(d) of the CWA requires publication of a list of impaired water bodies that do not meet water quality standards and the development of total maximum daily loads (TMDL) for pollutants that are causing impairments. A TMDL is an estimation of the maximum pollutant amount that can be present in a waterbody and still allow that waterbody to meet water quality standards for a specific beneficial use.

Of the waterways included in this plan and their tributaries, IDEQ has set TMDLs for Lake Cascade, the West Mountain tributaries to Lake Cascade, Gold Fork River, Boulder Creek, Willow Creek, Mud Creek, North Fork Payette River, tributaries to Payette Lake, and Box Creek. A Watershed Management Plan is in place for Lake Cascade and TMDLs are reviewed every five years to assess if conditions are improving, declining, or remaining static. The last TMDL review for the Lake Cascade Watershed was completed in 2018 and the last TMDL review for the North Fork Payette River Watershed as completed in 2012.

On a local level, the Valley County Waterways Ordinance includes a regulation against discharging sewage, garbage, fuel, and other materials directly into the waterways. However, it does not address other practices that could help protect the environmental qualities in and around the waterways.

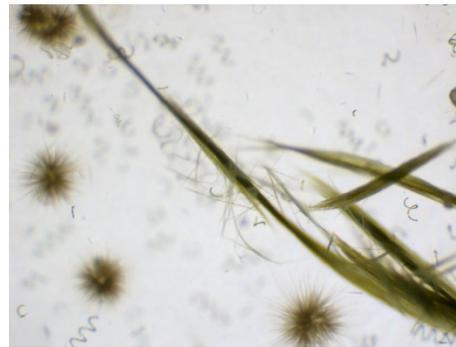
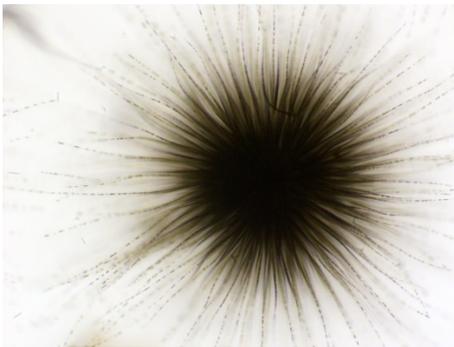
Environmental Concerns

There are several environmental concerns that affect the ability of the Valley County waterways to provide habitat for fish and other aquatic species, safe water for recreation, and clean water for drinking. The following is a description of the water quality issues that are currently concerns in Valley County.

Algal blooms

Phytoplankton are free-floating microorganisms found in lakes, streams, and oceans that convert sunlight into energy through photosynthesis. They are an important part of the aquatic food chain. The types of phytoplankton include algae, cyanobacteria, protist, and diatoms. Although not technically algae, cyanobacteria is commonly known as “blue-green or toxic algae”. When it grows excessively it becomes visible to the naked eye and can release toxins into the surrounding water or air making it harmful to people, animals, fish, and other parts of the ecosystem.

The adverse environmental impacts of excessive blue-green algae growth (harmful algal blooms) are many. The toxins that are released can cause skin irritation to swimmers and if the water is ingested, they can cause gastrointestinal illness and liver damage in humans and death in animals. As the algae die, they sink to the bottom of the waterbody, decompose, and remove oxygen from the water in the process. The pH of the water can also be affected due to the release of acid and base compounds during respiration and photosynthesis. This depletion of dissolved oxygen and change in pH is harmful to fish and other aquatic organisms. Large algal blooms can also block sunlight from reaching organisms deeper in the waterbody and cause unpleasant odors.



Microscopic view of Cyanobacteria including Gloeotrichia (top) and Dolichospermum and Aphanizomenon (bottom)

Harmful algal blooms are caused by the presence of excessive nutrients and can be exacerbated by warmer water temperatures and slow-moving water. Nitrogen and phosphorus are the primary nutrients of concern and since some types of cyanobacteria can utilize atmospheric nitrogen as a source of growth, phosphorus is most often the limiting factor. Algal blooms are a sign of premature eutrophication of lakes due to excess nutrients. Eutrophication is the process by which a waterbody becomes enriched in dissolved nutrients (e.g., phosphates), stimulating the growth of aquatic plants and usually resulting in the depletion of dissolved oxygen.

Phosphorus occurs naturally in the environment within soils and certain types of rocks. Anthropogenic (human-caused) sources of phosphorus include fertilizers, detergents, wastewater, erosion, and livestock grazing. Past studies and research in Valley County have shown that waterways are vulnerable to water quality degradation from anthropogenic activities, including development. A study of phosphorus loading around Lake Cascade found that due to the limited movement of phosphorus in sandy soils there was potential for phosphorus contamination from residential septic systems if they were installed within 13 meters of a water course or installed into the seasonal or permanent water table (Zimmer, 1983). Livestock grazing can contribute both phosphorus and nitrogen to waterways from feces and soil erosion that is carried to lakes and rivers by stormwater runoff. Grazed watersheds have been found to

contribute 10 to 50 times more phosphorus to receiving waters compared to forested or ungrazed watersheds (Duda, 1983) (Saxton, 1983).

There are several metrics used to measure the potential for harmful algae blooms, including concentrations of phosphorus, chlorophyll-a, and dissolved oxygen; water clarity measured by secchi transparency; and measurements of pH. Chlorophyll-a is the primary photosynthetic pigment of phytoplankton and is used as an estimator of phytoplanktonic biomass.

Sedimentation

Sediment originates from the erosion of rocks and soils and is the most common nonpoint source pollutant that affects rivers, streams, and lakes. Nonpoint source pollution comes from many diffuse sources rather than from an easily identifiable single source (e.g., sewage treatment plant or industrial source). Elevated levels of suspended sediment and bedload sediment are harmful to fish, prevent plant growth, and are major sources of phosphorus. Sediment that is deposited at the bottom of lakes can continuously release phosphorus causing eutrophication even while external inputs of nutrient loading are reduced.

Sediment is mobilized and carried to lakes, rivers, and streams through a variety of mechanisms. Along lakes and reservoirs, boat wave-induced erosion increases sediment in the waterbody, especially during high water periods. Shoreline erosion due to winds has created 5- to 50-foot vertical cliffs in some areas on the east shore of Lake Cascade. Livestock grazing and streambank erosion can cause excessive sediments to be carried into the receiving waters. Sedimentation is also caused by uncontrolled off-road vehicle use and gravel roads with poorly functioning drainage structures.

Big Payette Lake Wake Disturbance Study

In early 2020, a master's thesis study out of University of Idaho began a 2-year study on the impacts of wake disturbances in the nearshore of lakes and the potential resuspension of sediments and nutrients that could contribute to the eutrophication process (overabundance of nutrients that lead to excessive algal growth). This study came out of concerns from citizens about the no-wake zone movement on the part of the county from 300' to the state standard of 100' in relation to pressure from the boating industry.

The metric used to measure the sedimentation potential of a stream is the percentage of the banks that are considered stable. The goal of the National Pollutant Discharge Elimination System (NPDES) Stormwater Program under the CWA is to limit erosion and sediment pollution. Measures to implement this goal should be enforced.

Pathogen (coliform) and nitrate contamination

Coliform bacteria are present in the environment and in the feces of animals and humans. Although coliform bacteria are unlikely to cause illness, their presence is an indicator of the potential presence of harmful pathogens. Human health effects from pathogenic coliform bacteria include nausea, vomiting, diarrhea, acute respiratory illness, meningitis, ulceration of the intestines, and possible death. Since Payette Lake is used as a source of drinking water for the City of McCall, pathogen contamination is a real concern.

In addition to coliform bacteria, nitrates are also a concern for drinking water supplies. At concentrations above 10 mg/L in drinking water, nitrates can cause a diminished capacity of the blood to transport oxygen in infants younger than 3 months, which leads to "blue baby syndrome." Blue baby syndrome is a condition where a baby's skin turns blue due to a lack of oxygen.

Both coliform and nitrate contamination can originate from wastewater effluent or runoff over agricultural or forested lands where animals are present. There was a measurable impact on the fecal bacteria detected in streams downstream of recreational housing on the west side of Lake Cascade and an even higher impact downstream of grazed land (Zimmer, 1983). Since nitrate nitrogen (one part nitrogen plus three parts oxygen) is highly mobile and standard septic systems are only able to achieve 10 to 20 percent removal rates (U.S. EPA, 2002), septic leachfields and unpermitted systems located near waterbodies are concerns.

Aquatic habitat health

The primary environmental hazard to aquatic species is low dissolved oxygen during the winter and summer months, elevated water temperatures in the late summer, and low water levels or streamflow. Juvenile aquatic organisms are more susceptible to the effects of low dissolved oxygen. Reservoir drawdowns and low stream flows limit fish habitat and limit fish access to refuge areas in the tributaries where water is more highly oxygenated and cooler.

Dissolved oxygen (DO) concentration above 6 mg/L is optimal for aquatic life. Cold water holds more DO than warm water and increased flow rates provide more aeration and higher DO concentrations. Thus, elevated temperatures and low flows reduce DO and negatively impact aquatic habitat health.

Riparian vegetation conditions

Riparian zones or areas are the interface between land and waterbodies. Riparian vegetation provides a transition between wetland and upland areas. The riparian areas adjacent to the waterbodies provide water quality enhancement, flood control, shoreline stabilization, and very important wildlife habitat. Shading provided by willows and other riparian vegetation enhances aquatic habitat by cooling the water and increasing DO levels and provides protective cover for nesting waterfowl.

Livestock grazing, land development adjacent to waterbodies, and proliferation of access paths can destroy the riparian vegetation, in addition to increasing erosion and sedimentation potential. The riparian vegetation can also be greatly impacted by invasive, non-native plants.

Data Summary

Lake Cascade

Water quality became a concern in Valley County in the 1970's when noxious algal blooms, aquatic weeds, and fish kills began to occur frequently in Lake Cascade. In the early 1990's, significant blue-green algae blooms caused by low water levels, high phosphorous loading, and hot weather resulted in 23 cattle dying from ingesting the toxic algae in the reservoir. In 1995, a public health advisory was issued for Cascade Reservoir due to massive algal blooms. In 1996, the Lake Cascade Phase I Watershed Management Plan was developed and TMDLs were established for phosphorus for Cascade Reservoir, North Fork Payette River, and several tributaries.

Identified sources of phosphorus in Lake Cascade include unimproved roads adjacent to the reservoir; unpermitted and substandard septic systems in the West Mountain Area (Lappin, 1989), internal recycling of nutrients within the reservoir, and land management practices within the watershed (Lappin, 1989). Point sources of phosphorus include two wastewater treatment plants and the Idaho Department of Fish and Game fish hatchery.

Water quality monitoring by IDEQ from 1989 through present indicates that there have been improvements to water quality in the reservoir and most of the tributary systems, but the TMDL targets have still not been met. Recreation, cold water aquatic life, and agricultural water supply

are still designated as impaired. Impaired water quality is apparent in the increased frequency of public health advisories including in 2021 for Lake Cascade due to toxic algal blooms. In Lake Cascade, more frequent and in-depth monitoring of cyanobacteria and its causes of proliferation is warranted.

Big Payette Lake

In 1997, a technical study of Big Payette Lake was conducted to evaluate its capacity to assimilate nutrient inputs and its potential for eutrophication. Based on measurements of total phosphorus, nitrogen, and chlorophyll-a taken in 1995 and 1996, the lake was found to be oligotrophic (low productivity) because blue-green algae were found to be rare and total phosphorus was consistently low. However, the lake had low dissolved oxygen concentrations at the bottom due to the colder water at the bottom not mixing with the upper layers. It is also accumulating organic matter in the lakebed sediments, which cause an internal load of nutrients. These factors, combined with increases in residential development and recreational use, cause concern for potential future eutrophication of Payette Lake and a reduction in its water quality.

Coliform contamination and volatile and synthetic organic chemical contamination from fueling sources near the water supply intakes is a concern. In the summer of 2000, the surface water intake at the Shore Lodge encountered high levels of bacteria above the safe drinking water limits.

The Big Payette Lake Management Plan was completed in 1997. It included a management plan, an implementation plan, a monitoring and trend analysis, and an extensive list of recommended Best Management Practices (BMPs) (Big Payette Lake Water Quality Council, 1997). From 1997 to 2020, IDEQ has performed monitoring of dissolved oxygen (DO), total phosphorus (TP), total nitrogen (TN), and chlorophyll-a in Big Payette Lake (Cusack, 2020). The summary report was completed in 2020 and found that TP had remained relatively consistent but had increased in 2020 and should be closely monitored. TN was found to have decreased since 2005. Two of the four water quality objectives included in the Big Payette Lake Management Plan were not met for three consecutive years. This included the objective related to DO concentrations from June to September and the median value of TP measured from May to September. Measurements and impacts of hydrocarbons in Payette Lake should be evaluated. Eurasian water milfoil has been establishing in Payette Lake, causing impacts to aquatic habitat by consuming oxygen and blocking sunlight. The Valley County Weed Department is actively working to remove milfoil from Payette and Warm lakes.

North Fork Payette River

The North Fork of the Payette River is susceptible to erosion and sedimentation and has been identified with sediment impairment below Cascade Reservoir. An IDEQ assessment of the river between Payette Lake and Cascade Reservoir indicates that elevated temperature is a potential impairment to cold water aquatic life and salmonid spawning; however, nutrients are not in excess and DO and sedimentation is not an impairment in this reach of the river. Currently, the LPRWSD winter sewage effluent storage pond leaks into an underdrain that discharges into the NFPR.

McCall/Valley County Area of City Impact Workshop



Idaho Smart Growth Program Director Elaine Clegg conducted a workshop on August 27, 2021 with the full McCall City Council, and the Valley County Board of Commissioners. There were also members of the McCall Area Planning and Zoning Commission participating in the workshop. Most members participated in person following COVID19 protocols, and some members participated virtually.

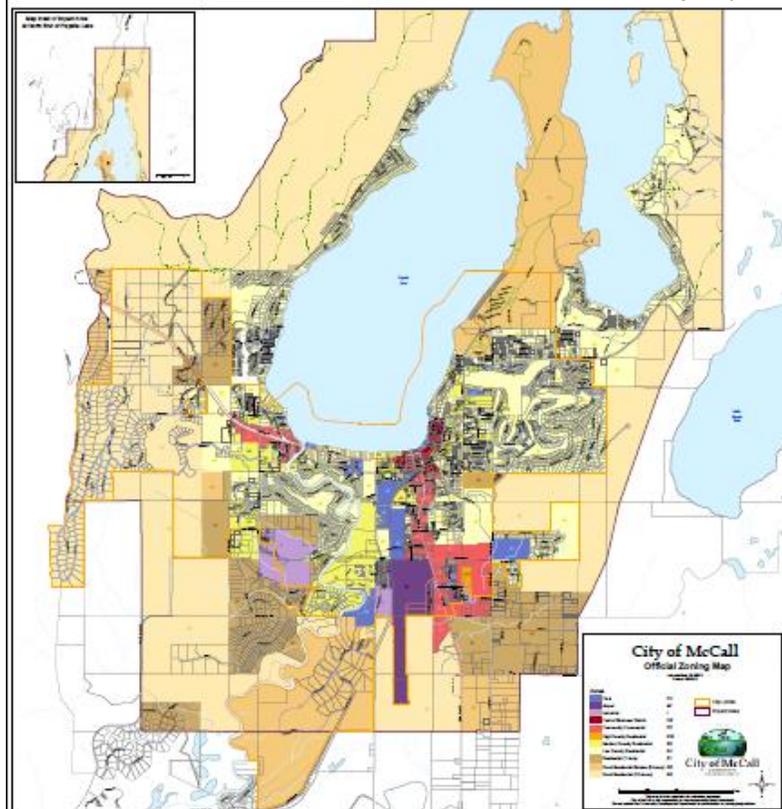
The workshop reviewed Area of City Impact statute, policies and practices based on the collaborative review and toolkit that Idaho Smart Growth produced. This presentation portion of the workshop was intended to produce a common base of knowledge and understanding among the city and county officials and staff about the Area of Impact and growth issues that are arising so the two bodies could embark on discussion about future decisions that may imminently affect the implementation of the Area of City Impact (AoCI) and responses to that growth. It noted that McCall and Valley County have successfully implemented the Area of City Impact agreement to date.

The presentation observed that McCall and Valley County have a unique implementation strategy where they have mutually agreed to implement the AoCI plan and ordinances by both governments adopting the same comprehensive plan, master plans and ordinances, as well as ordinance changes, for the City and Area of Impact. This was at one time a common implementation in Idaho but a court case that clarified that only counties have authority outside of corporate limits has persuaded some to govern AoIC with only County plans and ordinances that do not align completely with city plans and ordinances.

The Valley County/City of McCall implementation method is a very strong one that more fully supports the intent of the statute but does require a good close working relationship between elected officials and staff of both governments. Additionally, for land use matters, the McCall Area Planning and Zoning Commission is a joint commission made up of members from the city and impact area and appointed by the respective local governing boards, this board structure makes the implementation of the AoCI even stronger in aligning the city and county interests and plans.

There was discussion about the changes to identifying the trade area in AoCI plans that have been caused by on-line shopping and remote business activities. Additionally, the volume and delivery of various services such as police, fire, sewer, water and more have changed over the years. The participants agreed that it would be valuable to review service capacity and demands. While the future land use map was updated in 2018 the presentation showed that it has been more than ten years – the timeframe outlined in statute – since the AoCI agreement itself, including the guiding policies was updated. There may or may not be a need to update those policies but a review by staff should be completed to identify any needs.

McCall Area of Impact



McCall/Valley County Area of City Impact Workshop



Development decisions within the AoCI and the effect they could have on the future were reviewed and discussed. Specifically, the group discussed the changes that could ensue if development is allowed in the AoCI that is not envisioned in the plans and that may hinder the ability of the city to annex and provide services in the long-run. Annexation and the process, responsibilities, opportunities and challenges it presents were also examined. There was general agreement that it is more difficult to annex land that is already developed in an urban form than it is to plan and implement that development from the beginning through an annexation.

In examining the mission of each government, the presentation pointed out the common ground around maintaining the quality of life and the high quality of the environment. This led to a discussion of the growth issues that are highest in mind of the participants. The workshop was followed by a discussion of development on lands south of the McCall Airport and the need to protect encroachment of the airport.

Finally, there was broad agreement that the city and county officials would like to expand and continue the discussions begun at the workshop.

Four issues stood out as top of mind in this initial discussion:

1. On the top of the list of growth issues that needed further examination was housing affordability especially for the workforce of the recreational industry that drives much of the region's economy. There was discussion about where and how to develop housing affordable to the workforce, keeping in mind transportation costs and need for access to jobs.
2. Following the airport discussion there was a broader desire voiced to look at a more comprehensive way to plan the area between McCall the unincorporated community of Lake Fork to the south.
 - a. In addition to or absent a larger planning effort on the lands between McCall and Lake Fork there was general agreement that the city and county should explore a more formal and detailed plan for the Airport Influence area and its surrounding land use.
3. Endowment land controlled by the Idaho Department of Lands was the subject of a recent trade/purchase and development proposal. There was a desire to develop a collaborative vision for those and other lands around the lake that centers on conservation. Since the workshop a local group, in consultation with the city and county, has released the Payette Endowment Lands Strategy (PELS) Implementation Plan to request these lands remain largely in use as they are today. This plan is the starting point for working with IDL.
4. Code Enforcement for the McCall Impact Area is one of the topics where the Area of City Impact statute is silent. In the mutually agreed upon and adopted ordinance implementation structure used by the City of McCall and Valley County it is a subject that needs further review and agreement with input from both City and County Attorneys. Currently City staff has the expertise on enforcement of those policies, but the County has jurisdiction. It's possible that a further agreement, such as a JPA or MOU, could be used to simplify roles and make enforcement more efficient and effective.