

CHAPTER 2: ALTERNATIVES CONSIDERED

2.1 OVERVIEW OF ALTERNATIVES

This chapter of the Lake Area Comprehensive Plan/EA (LACP/EA) describes three alternatives for balancing the preservation and protection of the Lake Area’s natural, cultural, and scenic resources and visitor experience when guiding, designing, and evaluating future change. Complex and inter-related problems are addressed in this plan (see Chapter 1, Purpose and Need). Besides the no action, two alternatives are presented with the intention of providing direction for park staff, while still allowing flexibility to adapt to changing future conditions. Implementation of any of the alternatives will depend on resource protection priorities, environmental and cultural compliance, and future funding and could take many years. For this reason, the action alternatives combine desired future conditions with limits determined by planning components to create a plan that provides guidance and flexibility for future actions.

In the spring of 2007, the Yellowstone Park Foundation sponsored a week-long brainstorming workshop attended by NPS staff, Montana State University staff and students, and five design firms from the private sector, which allowed park staff to explore solutions for the area’s issues and needs. In winter of 2010, the NPS created an interdisciplinary team of staff and resource experts that compiled information about the area, including environmental surveys and studies, user data, public scoping comments, and direct site observations. The project team then developed alternatives for different areas of concern including natural and cultural resource protection, vehicular and pedestrian circulation and wayfinding, and changes to park operational facilities such as employee housing, utilities, and visitor facilities.

In this EA, Alternative A is the “No Action” alternative and Alternative B is the preferred alternative and the environmentally preferred alternative. Alternative A includes projects that have yet to be completed from past planning documents. The following is a general overview of the alternatives followed by a more in-depth section divided by planning locations with alternatives described for each location. The locations are shown in Figure 2-1.

2.1.1 Alternative A (No Action) Summary

Under Alternative A, No Action, the NPS would continue current management practices. Park managers would continue to rely on the 1974 Master Plan, 1988 Fishing Bridge Development Concept Plan EIS, and 1993 Lake and Bridge Bay Development Concept Plan EA for planning guidance in the Lake Area. Portions of these plans have been implemented. However, conditions have changed and technology related to resource mapping and scientific understanding has progressed. This alternative analyzes the remaining projects from past plans that have not yet been completed, in order to adequately represent future development that has been approved in previous compliance documents. Alternative A would result in the potential net increase of 127,000 square feet (2.9 acres) in building footprint and 270,000 square feet (2.9 acres) net increase in paved surfaces.

The projects in past plans reflect the following management objectives and purposes:

The purpose of the 1988 Fishing Bridge DCP was to "reduce grizzly bear deaths and human injuries in the Fishing Bridge area and to contribute to the overall grizzly bear recovery effort in the Greater Yellowstone Ecosystem while continuing to provide appropriate visitor services and facilities in the park."

The purpose of the 1993 Lake/Bridge Bay DCP was "... to protect resources, to offer a quality visitor experience, and to provide for efficient administration and operations."

Management Objectives from the 1993 plan included:

- Allow visitors to experience the natural and cultural resources in the area while ensuring the protection and preservation of those resources.
- Physically separate visitor services from administrative use areas, and eliminate the clutter of non visitor facilities.
- Consolidate all housing and office facilities, and accommodate future needs by allowing some growth within the physical and resource limits of the administrative site.
- Improve visitor orientation to and interpretation of the area.
- Provide opportunities for a variety of visitor activities, including interpretive and recreational functions.
- Provide opportunities to encourage pedestrian and bicycle circulation.
- Maintain and enhance views of the prime natural resource-Yellowstone Lake.
- Improve visitor vehicle circulation and safety.
- Reduce crowded employee housing conditions, and improve the quality of community services for all employees.
- To prevent any further displacement of grizzly bears, locate as much of the proposed additional development as possible within zones of influence attributable to existing developed areas.
- Alleviate long-term conflicts between bears and humans.
- Rehabilitate previously disturbed areas to their natural condition and habitat quality.
- Maintain water quality in Bridge Bay marina and mitigate any deterioration.

The recent completion of cultural and natural resource surveys in this area has allowed an updated impact analysis to be done. Alternative A relies on current resource information to analyze the impacts of projects listed in the 1988 and 1993 DCPs that were never completed. Under this alternative, desired future conditions for natural, cultural, and scenic resources and visitor experience (a part of the comprehensive planning process) would not be adopted. Boundaries, limits, and guidelines of where and how development can occur would not be available to comprehensively guide change.

The No Action alternative would fail to satisfy the purpose and need for the proposed plan and has adverse impacts to cultural resources; however, as required by NEPA, the no action alternative is carried forward for analysis in this EA.

Table 2-1: Summary of Projects Alternatives A

Alternative A (No Action)	
Fishing Bridge	<p>Net removal of up to 13,400 square feet in building footprint. No net gain in paved surfaces. Projects include:</p> <ul style="list-style-type: none"> • Remove Fishing Bridge Auto Repair Shop • Remove Fishing Bridge Auto Service station • Remove all concessioner employee housing (including the Boy’s Dorm, and YPSS housing) • Remove remaining cabins and storage sheds • Remove Fishing Bridge warming hut • Create seasonal hiking/biking trail from Bridge Bay to Fishing Bridge along lakeshore (partially completed)
Administrative	<p>Net gain of up to 72,800 square feet building footprint and 95,000 square feet gain of paved surfaces. Projects include:</p> <ul style="list-style-type: none"> • Construct 17 2-3 bedroom units to accommodate year-round employees • Construct 58 efficiency units for seasonal employees • Replace housing units from hatchery • Remove Utah Dorm • Expand maintenance and storage facilities • Relocate carpentry, electrical, and plumbing shops into larger, operationally adequate constructed facilities • Enlarge or replace current fire station in the administrative area • Construct NPS community center, playground facilities, picnic area, and trail network • Bury new utility lines • Insulate or bury new waterlines below normal frost line • Replace some sewage lift stations with new stations to improve system reliability
Lake Lodge	<p>Not to exceed 71,500 square feet net gain in additional building footprint and 21,000 square foot net gain in additional pavement. Projects include:</p> <ul style="list-style-type: none"> • Consolidate Lake Lodge cabins into motel-type buildings located approximately 100 yards from Lodge Creek • Remove Seagull Dorm • Remove employee pub • Construct employee pub and recreation center in center of housing area • Construct small maintenance building and employee parking area behind Lodge • Construct 60-room dormitory at site of Teal dorm • Relocate existing cabin to Lodge area to accommodate hotel winterkeeper • Construct auto repair shop and service station • Construct two new dormitories, for service station and Lake General Store employees behind auto repair station, with associated parking for 85 cars. • Relocate post office to already disturbed site near entrance of Lake developed area • Remove RV sites near Teal Dorm to make room for employee parking • Construct vehicle turnaround at end of Lodge road • Move road nearest Lodge Creek away from creek
Lake Hotel	<p>Approximate net loss of 2,500 square feet building footprint and 117,000 square feet net gain in paved surfaces. Projects include:</p> <ul style="list-style-type: none"> • Consolidate Lake Hotel cottages into motel-style buildings • Rehabilitate and adaptively re-use building next to boiler room • Redesign and increase Lake Hotel rear parking area • Remove post office • Remove winterkeeper’s cabin • Redesign circulation in hotel cabin area as a loop (approx. 300’ of road construction)

Alternative A (No Action)

Lakeshore

Approximately 4,700 square feet of net loss in building footprint and 36,400 net gain in pavement. Projects include:

- Remove trailers and non-historic housing units
- Rehabilitate and adaptively use Lake Service Station
- Construct new entrance road to front of Lake Hotel, including new intersection for hospital, service station, and post office; direct hotel guests to front of hotel for registry
- Relocate lakeshore roadway away from shoreline at ranger station
- Create separate pedestrian trail along roadway near the general store
- Propose a living history exhibit at Hatchery to interpret park’s role in fisheries management
- Remove 1940s boathouse
- Construct parking for 40 cars, 6 RVs, and 3 buses at general store.
- Construct fire station near hospital
- Construct parking for additional 5 cars at ranger station

Bridge Bay

Not to exceed 3,100 square feet net gain in additional building footprint and 200 square feet net gain in additional pavement. Projects include:

- Add new laundry and shower facility to camper services building
- Expand boat repair shop
- Expand marina and camper concession service store to provide additional sales space
- Repair marina bulkhead
- Dredge mouth of Bridge Bay
- Reduce fuel storage area and move nearer to fueling dock area
- Redesign interior of marina ranger station to improve efficiency
- Construct new residence near ranger station
- Install larger buried water distribution line at Bridge Bay to ensure adequate fire protection
- Improve circulation routes (road rerouted on Loop A, entrance road moved north slightly)
- Rehabilitate amphitheater
- Develop trailhead with parking and an interpretive exhibit at Grand Loop Road to facilitate use of Natural Bridge trail



Figure 2-1 Lake Administration & Fishing Bridge - Overview of Alternative A
Historic facilities removed and relocated

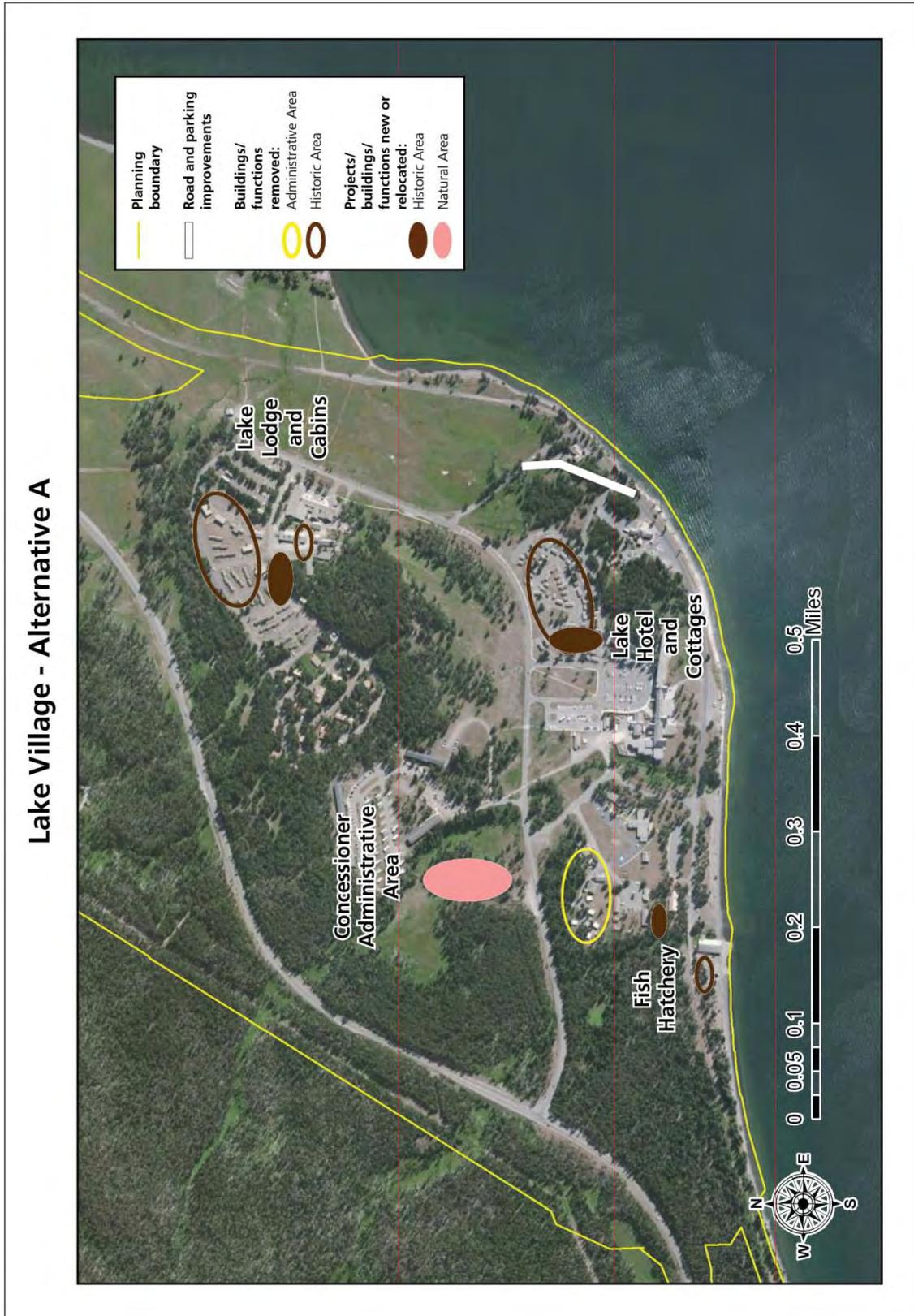


Figure 2-2 Lake Village - Overview of Alternative A
Historic facilities removed and relocated



Figure 2-3 Bridge Bay - Overview of Alternative A
Historic facilities removed and relocated



Lake Planning Locations & Zones

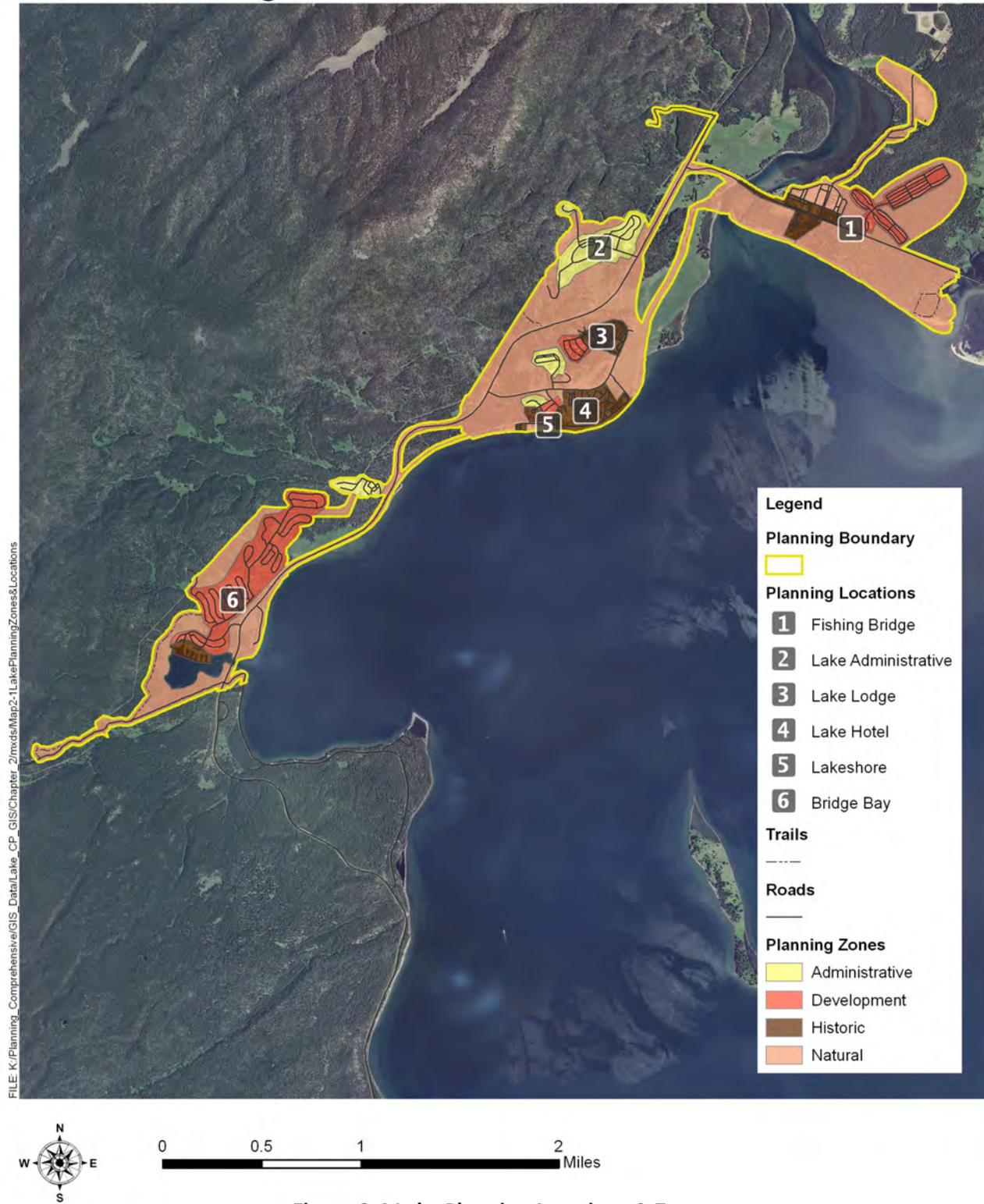


Figure 2-4 Lake Planning Locations & Zones

Figure 2-5: Design Standards for Alternatives B and C Summary

Lake Area Design Standards: Apply to both action alternatives (complete Design Standards are located in Appendix C)		
General standards All locations		<ul style="list-style-type: none"> Integrate new construction (such as buildings, walkways, barriers, light fixtures, signs, etc.) into landscape and adjacent historic districts through the use of compatible designs, massing, building heights, roofs, materials, color, and clusters of vegetation. Materials should be natural-appearing and/or native materials using neutral colors that recede into background. Avoid reflective surfaces. New roofs to be compatible in design and appropriate for snow levels. Follow fire management guidelines in order to allow natural fire processes that sustain surrounding habitat. All ground-disturbing projects and repairs to follow mitigation measures. Follow YNP vegetation management guidelines. Strip/stockpile topsoil before construction and replace after final grading to natural grade. Use sustainable design methods, materials, and technologies. Follow YNP night lighting and sign standards. Meet requirements of all applicable codes, including universal access. Maintain semblance of natural setting. Maintain and restore vegetation to blend buildings into landscape; trees interspersed around buildings, especially at building corners and entrances. Screen operational facilities and infrastructure away from visitor-use areas and roads.
Natural Zone	All locations	<ul style="list-style-type: none"> Preserve landscape and natural scenery by restricting development to a few above-ground structures such as signs and trails (no buildings). Preserve specified views.
Historic Zone	All locations within Historic District	<ul style="list-style-type: none"> New construction and alterations to be compatible in scale, clustering, roof, color, design, and materials according to the Secretary of the Interior Standards for the Treatment of Historic Properties maintaining the significant character defining features identified in the National Register Nomination form and Determination of Eligibility documentation for structures, historic districts, and National Historic Landmarks.
	Lake Hotel Location	<ul style="list-style-type: none"> Preserve prominence of hotel (porte-cochere, dining room, sunroom, and guest rooms) overlooking Yellowstone Lake through thin clusters of trees. Preserve site and entry sequence. Enhance rear of structure entry experience.
	Lakeshore Location	<ul style="list-style-type: none"> Preserve uninterrupted views to Yellowstone Lake for all lakeshore buildings. Maintain semblance of Grand Loop Road along lakeshore, even if use changes. See Planning Strategies for lakeshore circulation concepts.
	Lake Lodge Location	<ul style="list-style-type: none"> Lodge remains the dominant structure in this location, surrounded by cabin groupings within forested setting. Preserve uninterrupted views across meadow to Yellowstone Lake; meadow remains open space. Preserve entry sequence.
	Fishing Bridge Location	<ul style="list-style-type: none"> Protect historic walls, terraces, walkways, tree wells, and other historic fabric around Fishing Bridge Museum NHL. Protect patterns of rustic style features, vegetation medians and walkways. Preserve views of lake from Fishing Bridge and museum.
Development Zone	All locations	<ul style="list-style-type: none"> Utilize appropriate massing, heights, porches, roof overhangs, colors, and clusters of vegetation to blend development into surroundings and adjacent historic districts.
Administrative Zone	All locations	<ul style="list-style-type: none"> Functional facilities screened from view of visitor-use areas/road through building height, color, and vegetation buffer/screen. Buildings should be no more than height of surrounding tree canopy with a maximum of two stories.
Circulation Overlay Zone	All locations	<ul style="list-style-type: none"> Meet design standards specified for underlying zones. Maintain semblance of road within natural setting.

2.1.2 Alternative B (Preferred Alternative) Summary

Using the planning process described in Chapter 1, and building upon past planning efforts, Alternative B establishes an option for the LACP/EA that would balance the protection of park resources and values and enhance visitor experience by (a) adopting desired future conditions for resources and visitor experience, and (b) setting acceptable limits of change to existing development that supports these desired future conditions. This alternative also analyzes projects that fit the plan's purpose and need.

If projects from past plans still meet current needs, they have been included in Alternative B. Alternative B also proposes changes to some past planning decisions in order to better meet current resource and visitor needs. Most of these projects involved removing structures and relocating their functions to new locations. In these cases, current resource conditions indicate that it is appropriate to keep the structures in their current locations. Although there are many important resources in the Lake Area, one species listed as Threatened under the Endangered Species Act by the United States Fish and Wildlife Service (USFWS) is the grizzly bear. Grizzly bear distribution within the GYE has expanded during the last two decades as bears began to recolonize habitats outside YNP. Bears increased their range by 11% during the 1980s, and an additional 34% during the 1990s (Schwartz et al. 2002). Grizzly bears continue to expand their range and currently occupy more than 8.5 million acres (Schwartz et al. 2006b). As the population of grizzly bears expanded in the ecosystem, bear density inside YNP also increased. Recent studies suggest that bears inside YNP may be near carrying capacity, a term used to define the limits of available space, food, and other resources in the environment (Schwartz et. al. 2006c). Grizzly bears are discussed in more detail in Chapters 3 and 4 of this document. Due to the increased population of grizzly bears combined with decreased incidences of human-caused mortality, past planning decisions are re-evaluated in this plan.

All projects in Alternative B are subject to zoning, planning prescriptions and strategies, and design standards (see Figure 2-5 and Appendices B and C).

Under this alternative, the existing overall net change in development footprint for buildings in the Lake Area could be increased by up to approximately 120,600 square feet (2.8 acres). The overall development footprint for pavement could be increased by up to approximately 430,400 square feet (9.9 acres). These overall ranges in development footprint are dispersed throughout the Lake Area in specified locations described below.

Table 2-2: Summary of projects in Alternative B

Alternative B (Preferred)	
Fishing Bridge	<p>Net gain of up to 7,000 square feet in building footprint. Net gain of up to 379,000 square feet in paved surfaces (permeable where possible). Projects include:</p> <ul style="list-style-type: none"> • Retain, rehabilitate, and expand Fishing Bridge Auto Repair Station by approximately 600 square feet • Retain and renovate Fishing Bridge Service Station • Retain and rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization • Retain and expand YPSS dorm by approximately 40% • Renovate/infill Fishing Bridge RV Park within existing footprint to accommodate a mixture of longer and shorter oversized vehicles (southern loops would accommodate shorter oversized vehicles, northern loops would accommodate longer vehicles); also includes new shower building • Renovate camper services building, comfort stations, and parking within existing footprint • Retain remaining cabins and storage sheds • Widen road between RV Park and Fishing Bridge to allow for turning lane into RV Park and other facilities • Retain and renovate Fishing Bridge warming hut • Replace water lines throughout Fishing Bridge location • Improve pedestrian connection between General Store and Museum • Maintain fire camp behind Fishing Bridge store until replacement location is determined • Maintain helispots until fire camp is relocated • Modify Pelican Creek nature trail to protect rare plant habitat and archeological sites
Administrative	<p>Net gain of up to 58,000 square feet building footprint and 7,200 square feet gain of paved surfaces (permeable where possible). Projects include:</p> <ul style="list-style-type: none"> • Construct 40 bedrooms for NPS housing in multiplex units (1- 2 bedroom each) • Remove trailers • Replace Utah Dorm • Consolidate and expand maintenance and storage facilities • Construct animal-proof recycling and garbage transfer station • Update, improve, and expand utilities and the water tank throughout entire Lake Area • Construct offices, Emergency Services Building (ESB) • Construct community/recreation center
Lake Lodge	<p>Not to exceed 11,800 square feet net gain in additional building footprint and 8,100 square foot net gain in additional pavement (permeable where possible). Projects include:</p> <ul style="list-style-type: none"> • Move lodge cabins away from Lodge Creek to alternative sites within the location • Remove Seagull Dorm • Retain and renovate Pub facility • Maintain fencing between cabin area and Lodge Creek • Retain lodge cabin road in current location • Construct 60-room dormitory at site of Teal Dorm • Construct employee recreation hall in concessions’ administrative area • Formalize pedestrian walkway for employees between concessions’ administrative area to Lake Lodge area • Provide night lighting for pedestrian pathways within developed area that meets Night Lighting Standards

Alternative B (Preferred)

Lake Hotel

Not to exceed 3,600 square feet net gain in building footprint and no net change in paved surfaces footprint. Projects include:

- Retain hotel cottages in current configuration
- Construct breezeway between hotel and boiler room
- Provide seismic stabilization for Lake Hotel
- Install emergency generator for Lake Hotel
- Construct maintenance building for concessions use behind Lake Hotel
- Renovate post office to conform to design standards
- Retain winterkeeper’s cabin
- Develop entry structure adjacent to rear of Lake Hotel to define entrance to structure

Lakeshore

Not to exceed 13,000 square feet net gain in additional building footprint and 35,900 net gain in pavement (permeable where possible). Projects include:

- Construct 16 bedrooms in multiplex housing to replace transahomes in fisheries area
- Rehabilitate and adaptively use Lake Service Station
- Convert current road to pedestrian-only traffic between Lake Hotel and Lake General Store, no parking in front of hotel, create pedestrian/bike pathway along lakeshore, historic bus access to porte cochere
- Create an entry kiosk (signage, orientation panels) at pull-out on south side of access road
- Replace pedestrian viewing platform in front of Hotel
- Renovate Lake Ranger Station offices for year-round occupancy with public space
- Construct new road behind ranger station to enhance circulation in day-use area
- Construct/improve parking between ranger station and general store
- Adaptive use of hatchery for visitor use
- Construct lift station to enhance adaptive use of hatchery
- Enhance picnic area near hatchery (with seasonal closures)
- Rehabilitate hospital structure to conform with design standards
- Retain both boathouses
- Construct ESB near hospital

Bridge Bay

Not to exceed 26,900 square feet net gain in additional building footprint and 200 square feet net gain in additional pavement. Projects include:

- Construct shower facilities in campground
- Construct shower/laundry facility near marina
- Relocate fuel pump at marina
- Install electricity in Loops A-D
- Construct fence to separate humans and bears from utility corridor near H Loop of the Bridge Bay campground
- Utilize darker colors to blend transfer station buildings
- Repair marina bulkhead
- Dredge mouth of Bridge Bay marina
- Construct storage facilities at transfer station to replace storage currently in hatchery
- Keep campground circulation in current configuration
- Rehabilitate campground amphitheatre

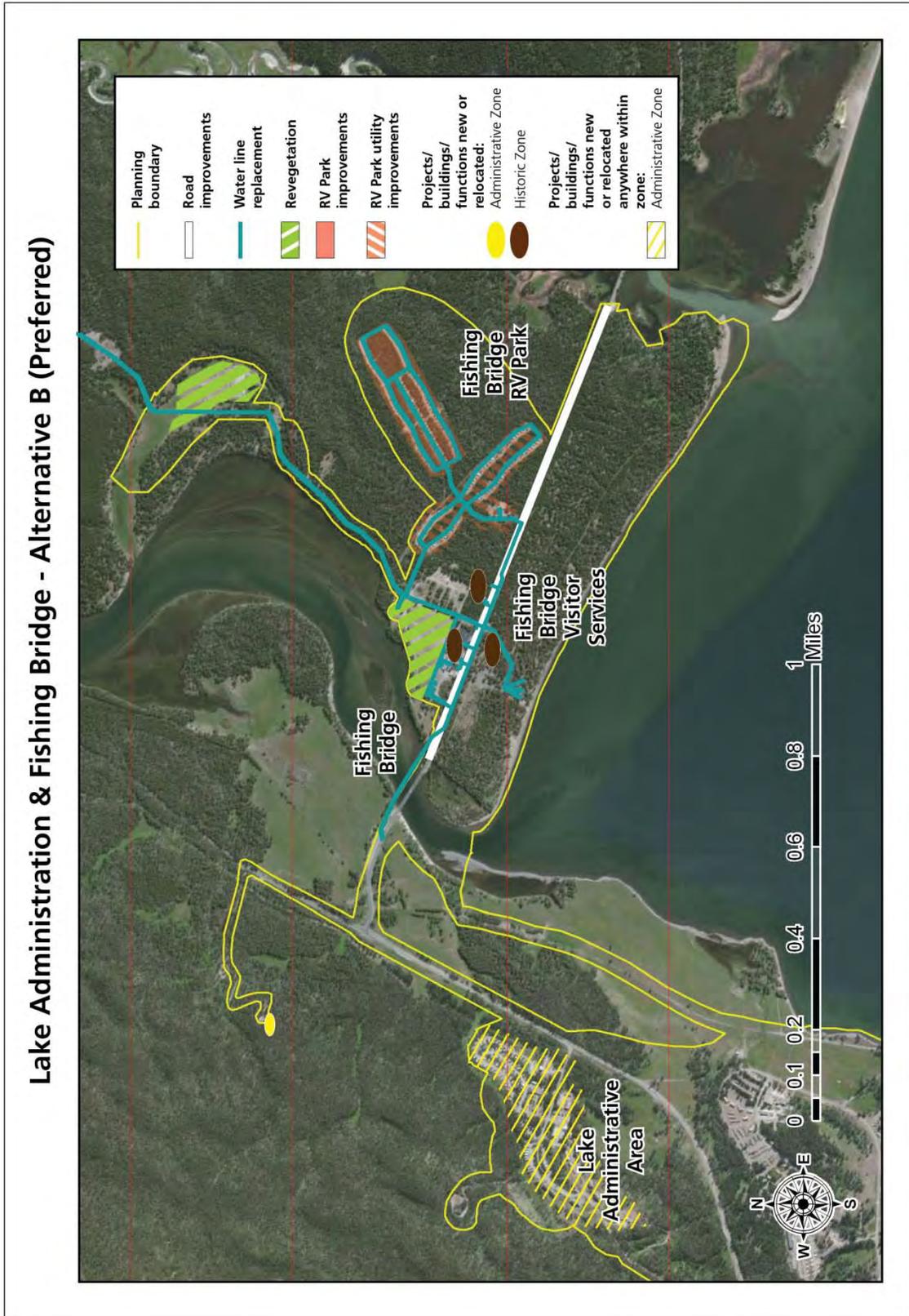


Figure 2-6 Lake Administration & Fishing Bridge - Overview of Alternative B (Preferred)
 Retain historic structures along road, widen road for turning lanes, improve RV Park, and replace waterlines

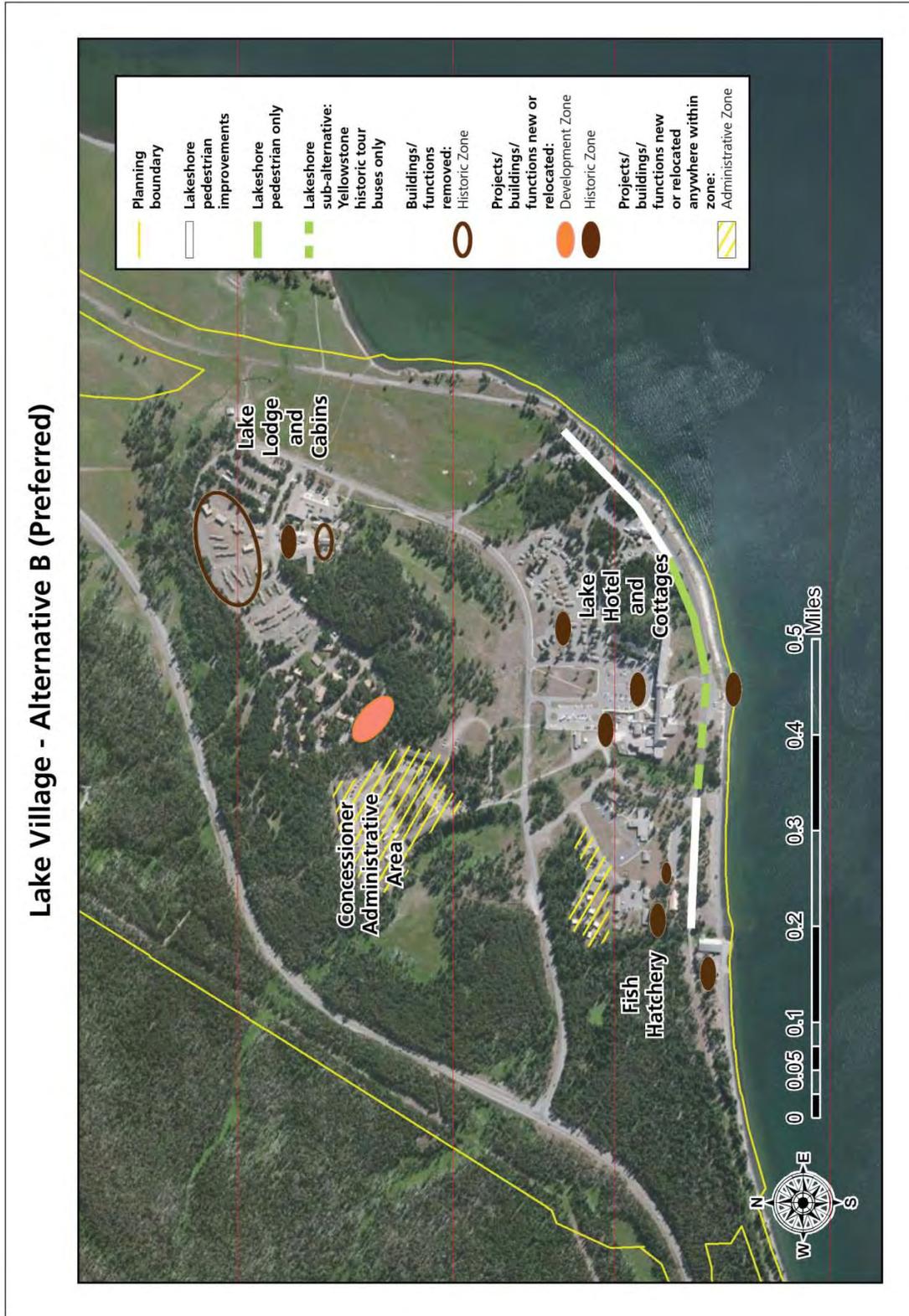


Figure 2-7 Lake Village - Overview of Alternative B (Preferred)
 Retain historic structures, design pedestrian walkway from hotel to lake overlook, and replace housing

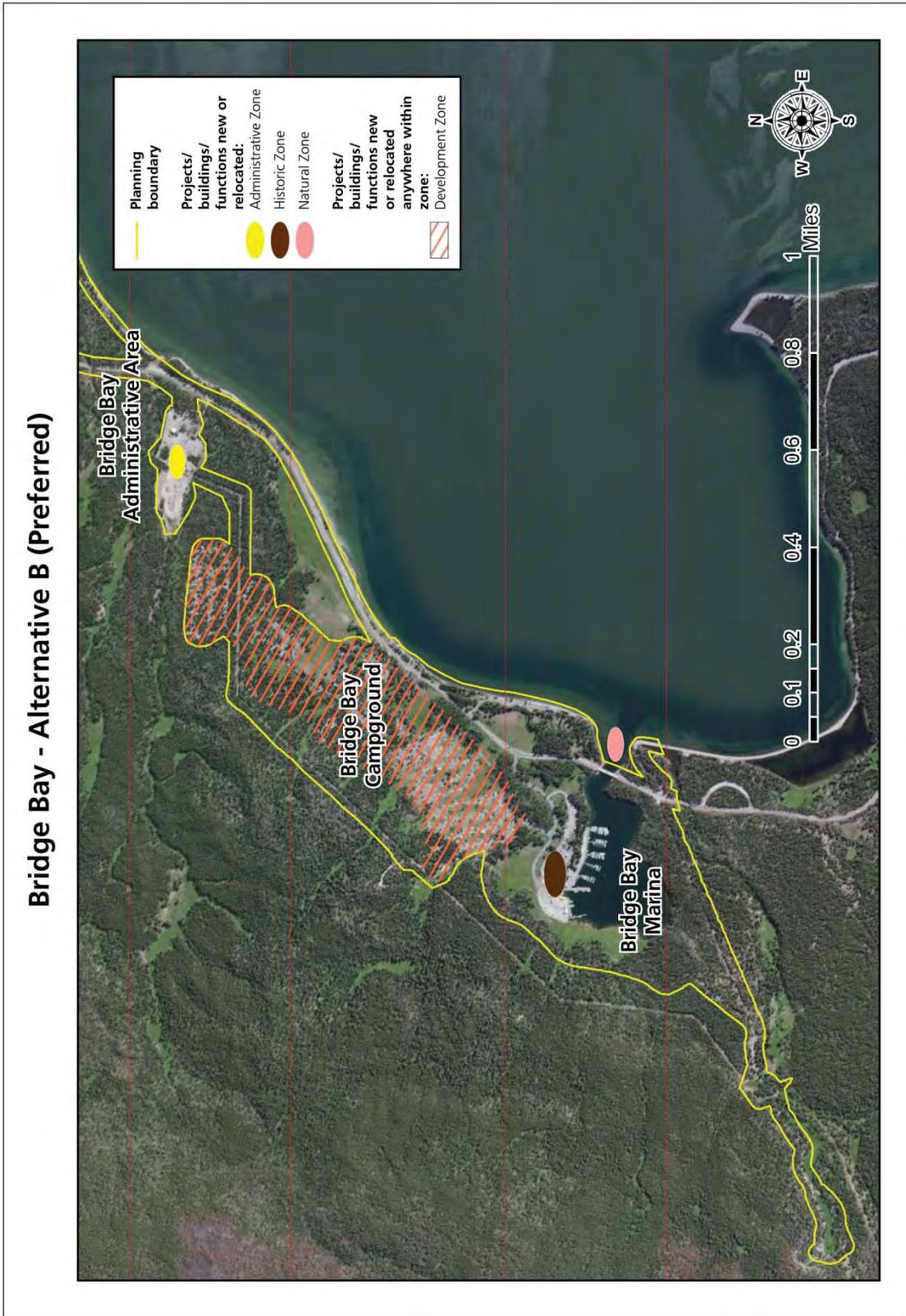


Figure 2-8 Bridge Bay - Overview of Alternative B (Preferred)
 Improve campground and marina facilities, and provide storage at transfer station

2.1.3 Alternative C Summary

Using the planning process described in Chapter 1, Alternative C establishes an option for the LACP/EA that would balance the protection of park resources and values and enhance visitor experience by (a) adopting the list of desired future conditions for resources and visitor experience, and (b) setting acceptable limits of change to existing development that supports the desired future conditions. This alternative also analyzes projects that fit the plan’s purpose and need. Several projects from past plans that meet current needs have been included in Alternative C. Alternative C proposes changes to past planning decisions in order to better meet current needs. As stated in Section 2.1.2, due to changing resource conditions, past planning decisions are re-evaluated in this plan.

All projects in Alternative C are subject to zoning, planning prescriptions and strategies, and design standards (see Figure 2-5 and Appendices B and C).

Under this alternative, the existing overall net change in development footprint for buildings in the Lake Area could be increased by up to approximately 115,900 square feet (2.7 acres). The overall development footprint for pavement could be increased by up to approximately 585,500 square feet (13.4 acres). These overall ranges in development footprint are dispersed throughout the Lake Area in specified locations described below.

Table 2-3: Summary of Projects in Alternative C

Alternative C	
Fishing Bridge	<p>Net gain of up to 6,300 square feet in building footprint. Net gain of up to 575,000 square feet in paved surfaces (permeable where possible). Projects include:</p> <ul style="list-style-type: none"> • Retain and rehabilitate Fishing Bridge Auto Repair Station • Retain and rehabilitate Fishing Bridge Service Station • Rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization • Retain and expand YPSS Dorm • Renovate/infill Fishing Bridge RV Park within existing footprint to accommodate longer oversized vehicles (all loops accommodate longer oversized vehicles); also includes new shower facility • Renovate camper services building, comfort stations, and parking within existing footprint • Widen East Entrance Road • Retain and renovate Fishing Bridge warming hut • Replace water lines throughout Fishing Bridge location • Improve pedestrian connection between General Store and Museum • Maintain Fire Camp behind General Store
Administrative	<p>Net gain of up to 47,400 square feet building footprint and 3,300 square feet gain of paved surfaces. Projects include:</p> <ul style="list-style-type: none"> • Replace Utah Dorm • Construct 20 bedrooms in multiplex housing units for NPS employees (1-2 bedrooms each) • Consolidate and expand maintenance and storage facilities • Construct year-round offices and ESB • Remove garbage and recycling frequently, in order to keep out animals, even in winter • Update, improve, and expand utilities and the water tank throughout the entire Lake Area

Alternative C

Lake Lodge

Not to exceed 23,700 square feet net gain in additional building footprint and 8,100 square feet net gain in additional pavement. Projects include:

- Maintain Lake Lodge cabins in current location
- Maintain seasonal closures and fencing between cabin area and Lodge Creek
- Retain Lodge Cabin road in current location
- Remove personnel office building behind Lake Lodge
- Retain Seagull Dorm
- Renovate pub for adaptive reuse
- Construct new employee pub in concessions' administrative area
- Construct winterkeeper's cabin in concessions' administrative area
- Construct 60-room dormitory at site of Teal dorm
- Construct maintenance building for concessions use in concessions' administrative area
- Formalize pedestrian walkway for employees between concessions administrative area to Lake Lodge area
- Provide night lighting for pedestrian pathways within developed area that meets Night Lighting Standards

Lake Hotel

Net decrease of 1,200 square feet net gain building footprint. No change in paved surfaces. Projects include:

- Retain hotel cottages in current configuration
- Develop entry structure adjacent to rear of Lake Hotel to define entrance to structure
- Remove winterkeeper's cabin and replace in concession's admin area
-

Lakeshore

Not to exceed 11,000 square feet net gain in additional building footprint and 1,100 square foot net loss in pavement. Projects include:

- Construct 16 bedrooms in multiplex housing to replace transahomes in fisheries area
- Rehabilitate and adaptively use Lake Service Station
- Convert current road to one-way vehicular traffic between Lake Hotel and Lake General Store, no parking in front of hotel, create pedestrian/bike pathway along lakeshore
- Create an entry kiosk (signage, orientation panels) at pull-out on south side of access road
- Replace pedestrian viewing platform overlooking lake in front of hotel
- Renovate Lake Ranger Station for year-round occupancy with public space
- Enhance picnic area near hatchery structure (with seasonal closures to protect grizzly bears)
- Construct floating pier near hatchery to allow additional use and views of lake
- Retain and renovate both boathouses for visitor-use

Bridge Bay

Not to exceed 28,800 square feet net gain in additional building footprint and 200 square foot net gain in additional pavement. Projects include:

- Construct 3 shower and laundry facilities for visitor use in campground/marina
- Relocate fuel pump at marina
- Install electric hook-ups in Loops A-D of campground
- Move utility corridor near H Loop to outside campground to protect humans and grizzly bears
- Repair marina bulkhead
- Re-dredge mouth of Bridge Bay marina
- Construct storage facilities at the transfer station

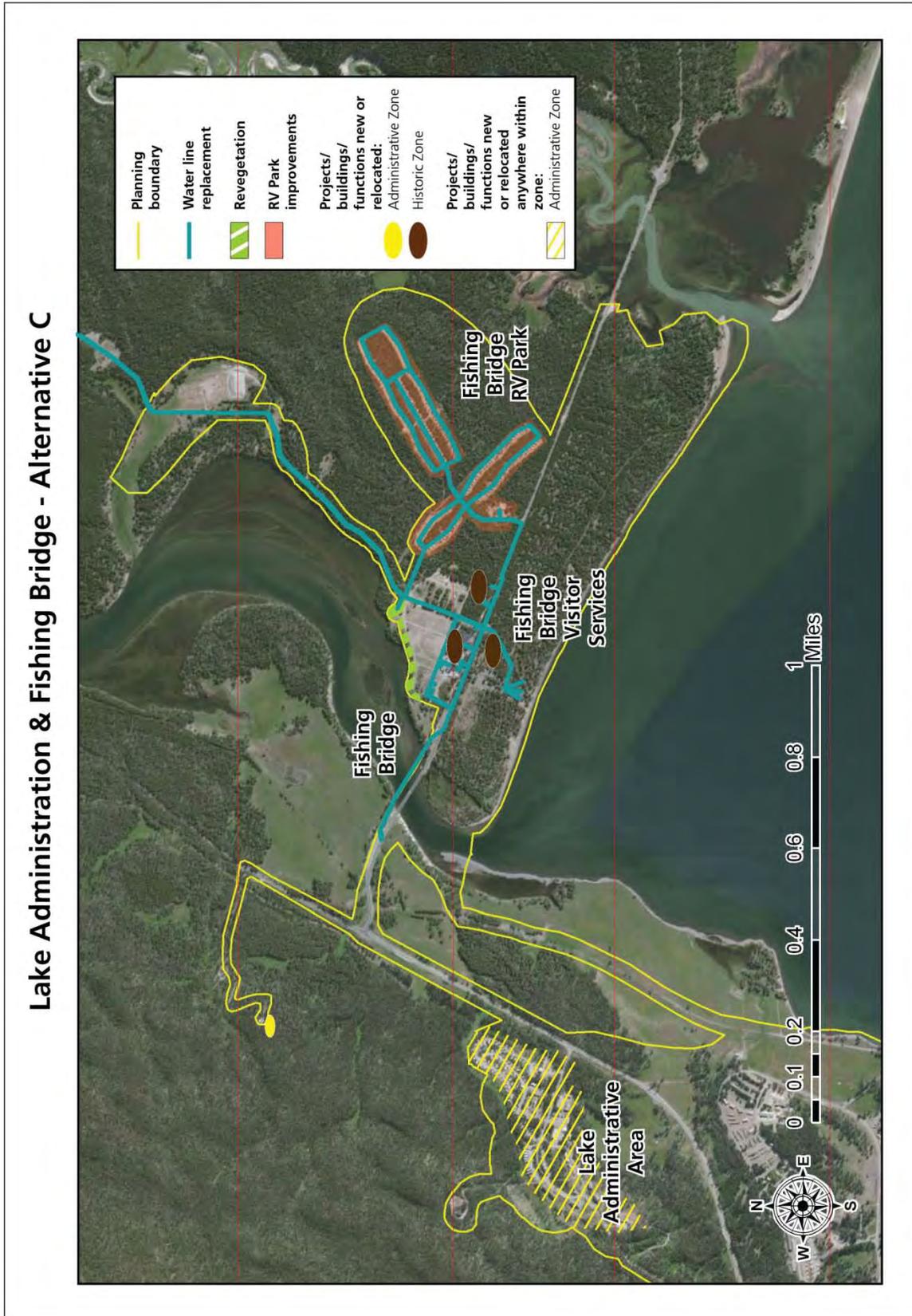


Figure 2-9 Lake Administration & Fishing Bridge - Overview of Alternative C
 Retain historic structures along road, infill Fishing Bridge RV Park, and replace waterlines



Figure 2-10 Lake Village - Overview of Alternative C
 Retain historic structures in place, construct floating pier for visitor access to lake, and replace housing



Figure 2-11 Bridge Bay - Overview of Alternative C
 Improve campground and marina facilities, and provide storage at transfer station

2.2 FISHING BRIDGE LOCATION



Figure 2-12 Fishing Bridge Location: No Action Alternative A

2.2.1 Alternative A (No Action) – Fishing Bridge Location

Under Alternative A, No Action, the Fishing Bridge location would continue to provide support and education to visitors. The no action would continue maintenance and repair of facilities. The following projects from the 1988 Fishing Bridge DCP/EIS have not been completed. This alternative assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects from the 1988 Fishing Bridge DCP/EIS:

- Remove Fishing Bridge Auto Repair shop
- Remove Fishing Bridge Auto Service Station
- Remove all concessioner employee housing (including Boy's Dorm, and YPSS dorm)
- Remove remaining cabins and storage sheds
- Remove Fishing Bridge warming hut
- Create seasonal hiking/biking trail from Bridge Bay to Fishing Bridge along lakeshore (partially completed)



Figure 2-13 Fishing Bridge Location: Planning Zones Alternatives B&C

2.2.2 Alternative B (Preferred Alternative) – Fishing Bridge Location

Under this alternative, the Fishing Bridge location would continue to provide support and education to visitors. Comprehensive planning components for the Fishing Bridge location follow:

Planning zones: This location contains the following planning zones: natural, historic, circulation overlay, and development.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for natural, historic, development, and circulation overlay zones.
- **Planning prescriptions:** The acceptable net increase in development footprint would be 7,000 square feet; which can accommodate projects such as an expanded auto repair shop and the addition of a shower facility in the RV park. The acceptable net increase in development footprint for pavement would be 379,000 square feet (most pavement is associated with infill at the Fishing Bridge RV Park and widening the road for a turning lane).

Projects (* Asterisks indicate structures that were proposed for removal under past planning. Changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations.):

- **Retain, rehabilitate, and expand the Fishing Bridge Auto Repair Shop***
The historic auto repair shop roof collapsed in March, 2011 and requires extensive repair. At the same time, this historic structure would be slightly expanded (by approximately 600 square feet) to accommodate modern vehicles. Renovation would follow the Secretary of the Interior’s guidelines for historic structures.
- **Retain and renovate Fishing Bridge Service Station***
This service station is heavily used by visitors traveling along the east entrance road and is the oldest service station in the park. Moving it to another location within the planning boundary area would cause greater impacts to resources than leaving it in its current location. Renovation would follow the Secretary of the Interior’s guidelines for historic structures.
- **Retain and rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization***
This historic building is part of the Fishing Bridge cultural properties and would be rehabilitated for seismic stabilization within its existing footprint. Renovation would follow the Secretary of the Interior’s guidelines for historic structures.
- **Retain and expand Yellowstone Park Service Station (YPSS) dorm***
By expanding this dorm by 40% (approximately 1,100 square feet), YPSS would be able to consolidate their housing into this one structure.
- **Retain remaining cabins and storage sheds in the Fishing Bridge location***
YPSS currently uses the cabins to house employees, but would no longer need to do so after the YPSS dorm is enlarged. The cabins would be used for storage and to tell the history of development in the Fishing Bridge location.
- **Renovate Fishing Bridge RV Park (within existing footprint) to accommodate longer vehicles.**
This renovation would involve redesigning and infilling the northern loop of the RV park to accommodate longer vehicles. A shower/restroom facility would also be constructed. All changes would take place within the current RV park footprint and result in a decrease in site capacity.

- **Renovate camper services building, comfort stations, and parking within existing footprint**
The camper services building, comfort stations, and parking need to undergo lifecycle maintenance in order to improve their condition and improve efficiency. This project would not increase footprint development.
- **Widen road between the RV park and Fishing Bridge**
The existing road would be widened to include a center turn lane in this area. Pedestrian crosswalks would be included. During the summer season, traffic becomes congested between the RV park and general store and is hazardous to pedestrians attempting to cross the road. Cone-bearing whitebark pine trees would be avoided wherever possible during construction.
- **Retain and renovate the Fishing Bridge warming hut***
This structure is used by visitors and employees during the winter months. Currently, the roof leaks and is in need of repair. Renovation would follow the Secretary of the Interior's guidelines for historic structures.
- **Replace main water lines throughout location**
The Fishing Bridge location has some of the oldest utilities in Yellowstone National Park. Most of the water lines in the Fishing Bridge location are 70-80 years old and have degraded and no longer operate efficiently, leading to a 20-35% water loss. In order to support visitors and protect resources, water lines must be replaced. In addition to leakage, the current system is too shallow to allow operation during the winter. Because of this, historic structures do not have fire protection in the winter. Approximately 25,000 linear feet of water line needs to be replaced in the Fishing Bridge location. Currently, the water main is attached under the Fishing Bridge as it crosses the Yellowstone River. The water main is exposed and contributes to the requirement for draining prior to winter. As part of the proposed action, horizontal directional drilling would be completed underneath the river to allow an 18 inch pipe to be inserted. The horizontal drilling would maintain a minimum depth of 15 feet below the bottom of the river.
- **Maintain fire camp behind Fishing Bridge General Store until a replacement location is determined**
The fire camp is currently staged behind the Fishing Bridge General Store in order to provide a central location during major fire events in the eastern portion of Yellowstone. Fire camp location is a complex issue, with human safety being of foremost importance. However, managers recognize that natural and cultural resources conflict at this site and under this alternative would search for a new location that meets both human safety and resource protection requirements.
- **Reclaim/restore native vegetation behind general store.**
As stated in previous consultation (1988 Fishing Bridge DCP/EIS), the NPS would restore the area behind the general store to natural conditions.
- **Modify Pelican Creek Nature Trail to protect rare plant habitat**
This trail, which starts with a boardwalk through wetlands, is heavily used by visitors. The trail brings visitors near the lakeshore, which has led to social trails, trampling, and local extirpation of Yellowstone sand verbena, a plant endemic to the park. This project would redesign a portion of the trail. Rangers could still conduct interpretive walks in the area and it would be open to visitors, but rare plant habitat would be protected by directing visitors away from sensitive areas.

2.2.3 Alternative C – Fishing Bridge Location

Under this alternative, the Fishing Bridge location would continue to provide support and education to visitors. Comprehensive planning components for the Fishing Bridge location follow:

Planning zones: This location would contain four planning zones: natural, historic, circulation, and development.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for natural, historic, development, and circulation overlay zones.
- **Planning prescriptions:** The acceptable net increase in development footprint would be 6,300 square feet; which could accommodate projects such as the addition of a shower facility in the RV park. The acceptable net increase in development footprint for pavement would be 500,900 square feet (most pavement would be associated with infill at the Fishing Bridge RV Park).

Projects (* Asterisks indicate structures that were proposed for removal under past planning. Changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations.):

- **Retain and rehabilitate the Fishing Bridge Auto Repair Shop***
The historic auto repair shop roof collapsed in March, 2011 and requires extensive repair. Renovation will follow the Secretary of the Interior’s guidelines for historic structures.
- **Retain the Fishing Bridge Service Station***
Relocation of this important visitor service and historic structure would have greater resource impacts than keeping it in place. Therefore, it would not be removed.
- **Retain and rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization***
This is a historic building that is part of the Fishing Bridge Historic District and it would be rehabilitated within its existing footprint. Renovation will follow the Secretary of the Interior’s guidelines for historic structures.
- **Retain and expand YPSS dorm***
By expanding this dorm by 40% (approximately 1,100 square feet), YPSS would be able consolidate their housing into this unit.
- **Renovate Fishing Bridge RV Park (within existing footprint) to accommodate longer vehicles.**
This renovation would involve redesigning and infilling both the southern and northern loops of the RV park to accommodate longer vehicles. This project also includes the addition of one shower facility. All changes would take place within the current RV park footprint and result in a decrease in site capacity.
- **Renovate camper services building, comfort stations, and parking within existing footprint**
The camper services building, comfort stations, and parking need to undergo lifecycle maintenance in order to improve their condition and improve efficiency. This project would not increase footprint development.
- **Retain and renovate Fishing Bridge warming hut***
This building, which is located along the road, is used by visitors and employees during the winter months. Currently, the roof leaks and is in need of repair. Renovation will follow the Secretary of the Interior’s guidelines for historic structures.
- **Replace main water lines throughout location**

The Fishing Bridge area has some of the oldest utilities in Yellowstone National Park. Most of the water lines in the Fishing Bridge area are 70-80 years old. The water lines at Fishing Bridge have degraded and no longer operate efficiently, leading to a 20-35% water loss. In order to support visitors and protect resources, water lines must be replaced. In addition to leakage, the current system is too shallow to allow operation during the winter. Because of this, historic structures do not have fire protection in the winter. Approximately 25,000 linear feet of water line needs to be replaced in the Fishing Bridge Area. Currently, the water main is attached under the Fishing Bridge as it crosses the Yellowstone River. The water main is exposed and contributes to the requirement for draining prior to winter. As part of the proposed action, horizontal directional drilling would be completed underneath the river to allow an 18 inch pipe to be inserted. The horizontal drilling would maintain a minimum depth of 15 feet below the bottom of the river. Throughout the Fishing Bridge area, mature, cone-bearing whitebark pine trees would be avoided wherever possible during water line replacement.

- **Widen road between the RV park and Fishing Bridge**
The existing road would be widened to include a center turn lane in this area. Pedestrian crosswalks would be included. During the summer season, traffic becomes congested between the RV park and general store and is hazardous to pedestrians attempting to cross the road. Cone-bearing whitebark pine trees would be avoided wherever possible during construction.
- **Maintain fire camp behind Fishing Bridge General Store**
This alternative would keep the fire camp behind the Fishing Bridge General Store in order to provide a central location during major fire events in the eastern portion of Yellowstone.

2.3 LAKE ADMINISTRATIVE LOCATION

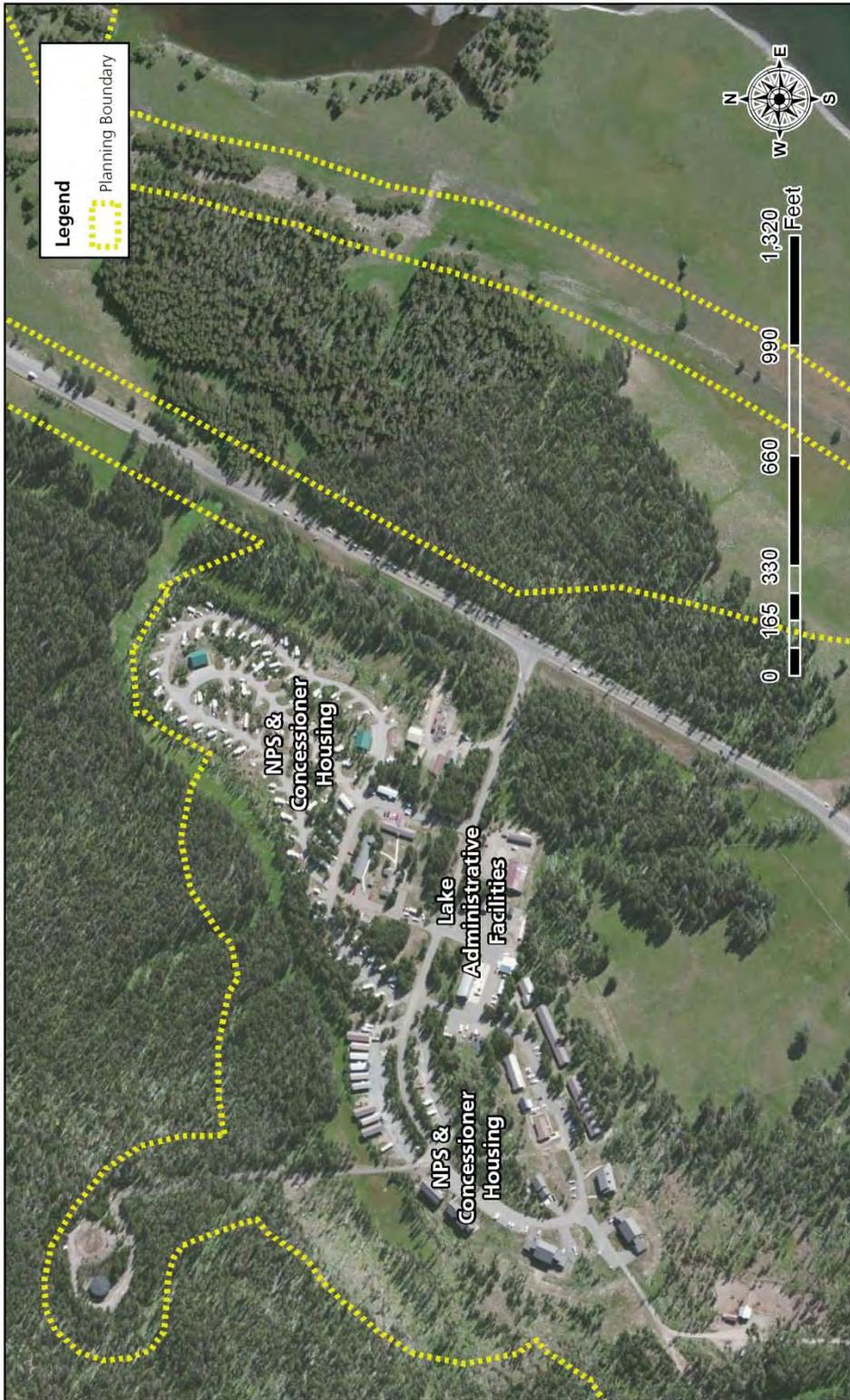


Figure 2-14 Lake Administrative Location: No Action Alternative A

2.3.1 Alternative A (No Action) – Lake Administrative Location

Under this alternative, the Lake Administrative location would continue to provide operational support allowing increased efficiency in protecting visitor experience and resources and enhancing public safety. The No Action alternative would continue maintenance and repair of facilities. The following projects from the 1988 Fishing Bridge DCP/EIS and 1993 Lake/Bridge Bay DCP/EA have not been completed. This alternative assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects from the Fishing Bridge DCP/EIS and Lake/Bridge Bay DCP/EA:

- Construct 17 2-3 bedroom units to accommodate year-round employees
- Construct 58 efficiency units for seasonal employees
- Replace housing units from the Fish Hatchery
- Remove Utah Dorm
- Expand maintenance and storage facilities
- Relocate carpentry, electrical, and plumbing shops into larger, well-constructed facilities
- Enlarge or replace current fire station in the administrative area
- Construct community center, playground facilities, picnic area, and trail network
- Bury new utility lines
- Insulate or bury new waterlines below normal frost line

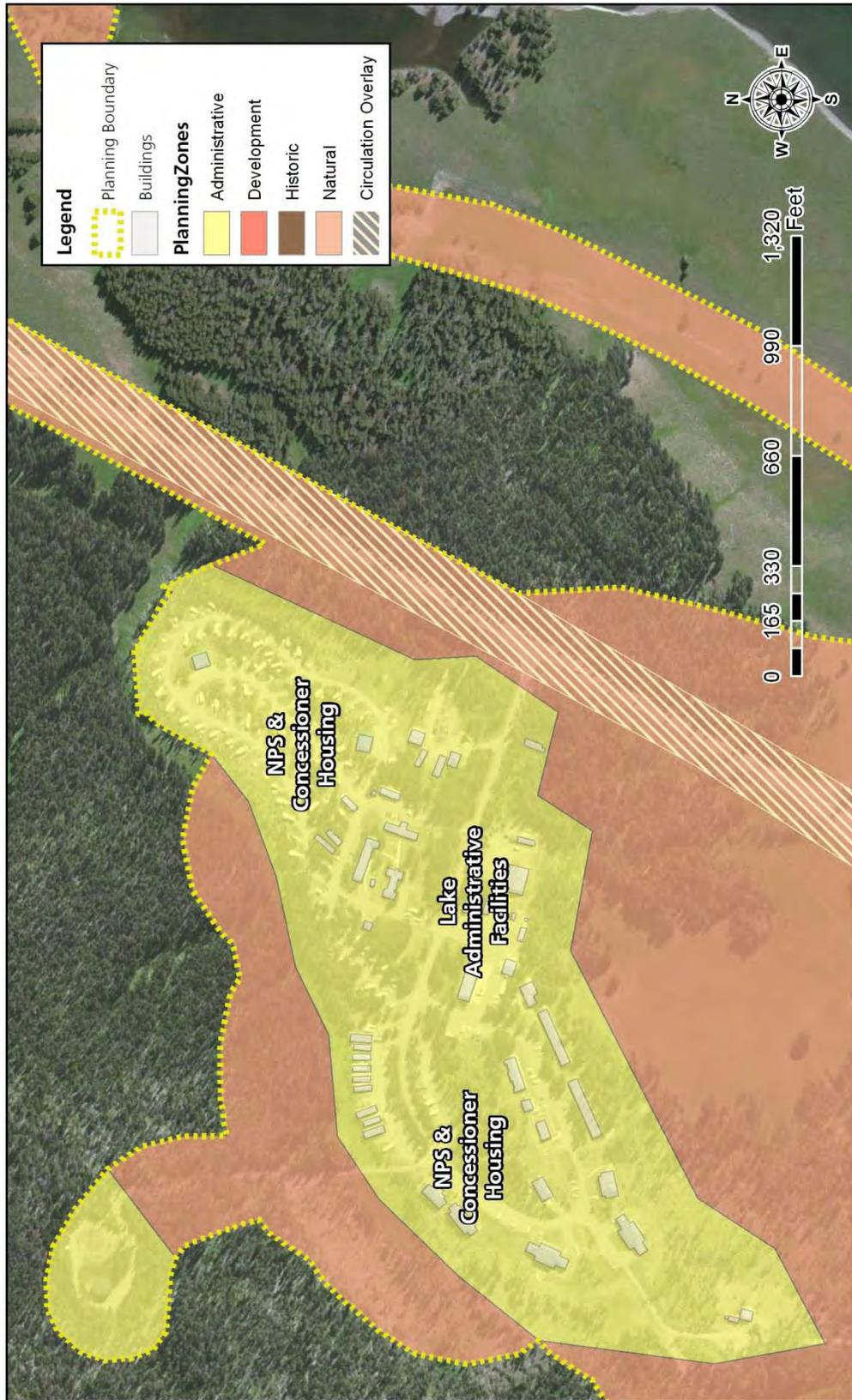


Figure 2-15 Lake Administrative Location: Planning Zones Alternatives B&C

2.3.2 Alternative B (Preferred) – Lake Administrative Location

Under this alternative, the Lake Administrative location would continue to provide operational support allowing increased efficiency in protecting visitor experience and resources and enhancing public safety. Comprehensive planning components for the Administrative location follow:

Planning zones: This location contains administrative, natural, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for administrative, natural, and circulation overlay zones. This alternative would not expand the boundary of the current Administrative location; new construction projects would be infill.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 39,400 square feet; which could accommodate projects such as an emergency services and offices building and employee housing. The acceptable net change in development footprint for pavement would be 7,200 square feet.

Projects:

- **Construct the equivalent of 40 bedrooms for NPS housing in multiplex units**
In some cases this project would remove the trailers currently used for housing and replace them with multiplexes. The trailers are nearing the end of their life and inadequate for housing. The multiplexes would replace this sub-standard housing currently used by seasonal and year-round employees in a consolidated footprint.
- **Replace Utah Dorm**
The Utah Dorm is in poor condition and would be removed to make room for the consolidated administrative buildings or housing. It would be replaced with the same development footprint.
- **Consolidate and expand maintenance and storage facilities**
There is currently a shortage of maintenance and storage facilities for the Lake Area and maintenance functions are distributed among several small, inadequate cabins and other buildings. This project would construct one or more new buildings to accommodate maintenance and storage needs and would also improve worker efficiency and safety. This alternative assumes that the existing maintenance cabins would be removed.
- **Construct animal-proof recycling and garbage transfer station**
Currently, winter garbage solutions attract wildlife, which is then conditioned to human food. Secure garbage and recycling facilities would alleviate this problem. This project consists of a building to secure the garbage with associated fencing.
- **Update, improve, and expand water tank and utilities throughout area**
Due to their age, utilities need to be upgraded in order to increase efficiency, protect resources, and maintain visitor safety. Utilities would be upgraded or improved in place whenever possible. This project would also include replacement of the Fishing Bridge Water Tank. The tank is a partially buried 250,000 gallon concrete tank that was built in the 1930s. The outside of the tank is covered by layers of calcium deposit and is likely the result of leakage out of the tank. Leakage from the tank is calculated at 12,000 gallons per day. Currently on high summer use days the tank is drained so the amount of water loss is decreased and demands can be met. This results in limited fire supply storage to the entire Fishing Bridge, Lake and Bridge Bay areas.

- **Construct office/Emergency Services Building (ESB)**
There is inadequate office space for year-round employees, who have to move offices multiple times per year. Additionally, this area requires better facilities to house emergency vehicles such as ambulances and fire trucks in order to enhance visitor safety. This project would construct a facility similar to the Old Faithful ESB to provide year-round office space and emergency vehicle storage.
- **Construct community/recreation center**
The mess hall currently used for meeting space and as a community center is inadequate in terms of size. Additionally, rangers do not have a facility to maintain their fitness requirements. This alternative would solve these issues with a community/recreation center in the administrative area.

2.3.3 Alternative C – Lake Administrative Location

Under this alternative, the Lake Administrative location would continue to provide operational support allowing increased efficiency in protecting visitor experience and resources and enhancing public safety. Comprehensive planning components for the Administrative location follow:

Planning zones: This location contains administrative, natural, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for administrative, natural and circulation overlay zones.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 39,400 square feet; which can accommodate projects such as an emergency services and offices building and employee housing. The acceptable net change in development footprint for pavement would be 3,300 square feet.

Projects:

- **Construct the equivalent of 20 bedrooms for NPS housing in multiplex units**
This project would remove the trailers currently used for housing and replace them with multiplexes. The trailers are nearing the end of their life and inadequate for housing. The multiplexes would replace this sub-standard housing currently used by seasonal and year-round employees in a consolidated footprint.
- **Replace Utah Dorm**
The Utah Dorm is in poor condition and would be removed to make room for the consolidated administrative buildings or housing. It would be replaced with the same development footprint.
- **Consolidate and expand maintenance and storage facilities**
There is currently a shortage of maintenance and storage facilities for the Lake Area and maintenance functions are distributed among several small, inadequate cabins and other buildings. This project would construct one or more new buildings to accommodate maintenance and storage needs and would also improve worker efficiency and safety. This alternative assumes that the existing maintenance cabins would be removed.
- **Construct office/ESB facility**
There is inadequate office space for year-round employees, who have to move offices multiple times per year. Additionally, this area requires better facilities to house emergency vehicles such as ambulances and fire trucks in order to enhance visitor safety. This project

would construct a facility similar to the Old Faithful ESB to provide year-round office space and emergency vehicle storage.

- **Manage recycling and garbage to alleviate impacts to wildlife**
Currently, winter garbage solutions attract wildlife, which is then conditioned to human food. Garbage would be during the winter via a tracked vehicle on a weekly basis.
- **Update, improve, and expand utilities throughout area**
Due to their age, utilities need to be upgraded in order to increase efficiency, protect resources, and maintain visitor safety.

2.4 LAKE LODGE LOCATION

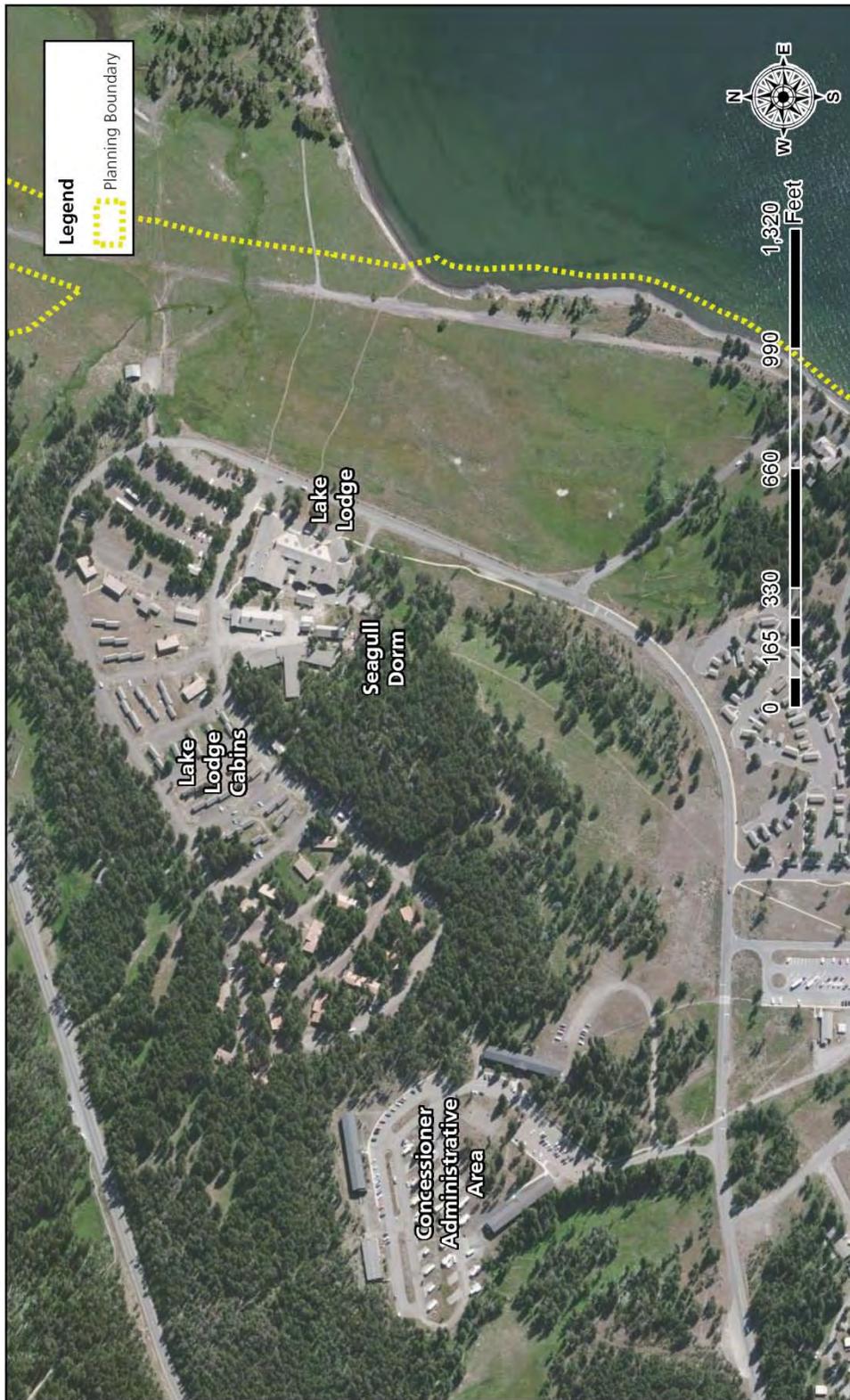


Figure 2-16 Lake Lodge Location: No Action Alternative A

2.4.1 Alternative A (No Action) – Lake Lodge Location

Under this alternative, the Lake Lodge location would continue to provide support to visitors in the form of dining and lodging and would provide employee housing for concessioner employees. The no action would continue maintenance and repair of facilities. The following projects from the 1993 Lake/Bridge Bay DCP/EA have not been completed. This plan assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects from the Lake/Bridge Bay DCP/EA:

- Consolidate Lake Lodge cabins into motel-type buildings located approximately 100 yards from Lodge Creek
- Remove Seagull Dorm behind the Lake Lodge
- Remove employee pub behind the Lake Lodge
- Construct employee pub and recreation center in the concessions administrative area
- Construct small maintenance building and employee parking area behind Lodge
- Construct 60-room dormitory at site of Teal Dorm
- Construct new cabin in the Lodge area to accommodate the hotel winterkeeper
- Relocate Fishing Bridge Auto Repair shop and Fishing Bridge Service Station to already disturbed site near entrance of Lake Village
- Construct two new dormitories, for service station and General Store employees behind auto repair station, with associated parking for 85 cars
- Relocate post office to already disturbed site near entrance of Lake Village
- Remove RV sites near Teal Dorm to make room for employee parking
- Construct vehicle turnaround at end of Lodge road
- Move road nearest Lodge Creek away from creek



Figure 2-17 Lake Lodge Location: Planning Zones Alternatives B&C

2.4.2 Alternative B (Preferred) – Lake Lodge Location

Under this alternative, the Lake Lodge location would continue to provide visitor support such as dining and lodging as well as employee housing for concessioner employees. Comprehensive planning components for the Lake Lodge location follow:

Planning zones: This location contains historic, administrative, natural, development, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, development, and circulation overlay zones for the Lake Lodge location.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 15,600 square feet; which can accommodate projects such as a new dormitory. There would be a net gain of 8,100 square feet in pavement in this location.

Projects (* Asterisks indicate structures that were proposed for removal under past planning. Changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations.):

- **Move Lodge cabins away from Lodge Creek to alternative location**
In order to alleviate potential conflicts between grizzly bears and humans during spawning season, this alternative proposes moving cabins within 100 yards of Lodge Creek to outside that radius. Additionally, Mission 66-era cabins in this location would be moved to the western outside loop, making room for the historic cabins to be consolidated nearer to the Lodge. This project was agreed upon in previous consultation with the USFWS but has yet to be completed.
- **Retain Lodge cabin road in current location***
While this alternative does propose moving cabins away from the creek, the road would stay in its current configuration. The 1993 DCP proposed relocating the road away from Lodge Creek.
- **Remove Seagull Dorm**
This building was proposed to be removed in the 1993 Lake/Bridge Bay DCP/EA and therefore has not received funding for its upkeep and is consequently in poor condition and would be removed. This historic building is used sporadically to house concession employees when no other housing is available. It is in poor condition and is substandard for housing.
- **Retain and renovate Pub facility***
This project would renovate the historic pub, which is part of the Lake Historic District. In the 1993 DCP, the reasoning for removal was cited as conflicts (noise) between visitors and employees. Under this alternative, potential noise conflicts between employees and visitors would be managed administratively (i.e., restrictions on operating hours).
- **Construct a dormitory at site of Teal Dormitory**
This new dorm, which was also proposed in the 1993 Lake/Bridge Bay DCP/EA, would provide approximately 60 rooms for concessions employees that work in the Lake Area. The Teal Dorm would be removed and the new, larger dorm constructed in its place. Construction of this dorm would also provide rooms for those lost from adaptive use of Seagull Dorm as housing.
- **Construct employee recreation hall in concessions' administrative area**
Currently, employees use the recreation hall in the southern wing of the Lake Lodge. This

alternative proposes building a new recreation hall in the concessions' housing area, which would allow employees to recreate near their homes and allow the Lake Lodge recreation hall to be available for visitor use. This action would also reduce noise conflicts between visitors and employees.

- **Formalize pedestrian walkway with night lighting that meets Night Lighting Standards for employees between Concessions Administrative Area to Lake Lodge area**
This project would reduce trampling and social trails as employees travel between Lake Lodge and their housing units. Appropriate lighting would make walking through this area safer for employees.

2.4.3 Alternative C – Lake Lodge Location

Under this alternative, the Lake Lodge location would continue to provide visitor support such as dining and lodging as well as employee housing for concessioner employees. Comprehensive planning components for the Lake Lodge location follow:

Planning zones: This location contains historic, administrative, natural, development, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, development, and circulation overlay zones for the Lake Lodge location.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 19,900 square feet; which can accommodate projects such as a new employee pub. There would be a net gain of 8,100 square feet in pavement in this location.

Projects (* Asterisks indicate structures that were proposed for removal under past planning. Changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations.):

- **Maintain Lake Lodge cabins in current location**
The 1993 Lake/Bridge Bay DCP/EA proposed consolidating the Lake Lodge cabins into motel-like structures away from Lodge Creek. Mitigation measures and changing resource conditions indicate that there are currently few resource conflicts in the Lake Lodge cabin area, thus negating the need to move the cabins. Mitigation measures, such as late openings for cabins closest to the creek and fencing, would remain in place.
- **Retain Lodge cabin road in current location***
This alternative would maintain the road in its current configuration. As stated above, the 1993 DCP proposed relocating the road away from Lodge Creek.
- **Retain Seagull Dorm**
This building was proposed to be removed in the 1993 Lake/Bridge Bay DCP/EA was slated for removal in past plans and therefore has not received funding for its upkeep and is consequently in poor condition and would be removed. This historic building is used sporadically to house concession employees when no other housing is available. It is in poor condition and is substandard for housing. This alternative proposes adaptively re-using this building.
- **Retain and renovate pub for adaptive re-use***
This project would renovate the historic pub, which is part of the Lake Lodge historic district, to be used by concessions for either administrative or visitor use. This project

would improve visitor experience because there have been noise complaints from visitors regarding employees congregating at the pub during quiet hours.

- **Construct winterkeeper's cabin in concessions' administrative area**
This alternative proposes that the current winterkeeper's cabin, which is located behind the Lake Yellowstone Hotel, be removed. Replacement housing would be located in the Lake Concessions' housing area.
- **Construct new employee pub in concessions' administrative area**
This alternative proposes constructing an employee pub in the concessions' administrative area, which would provide a location for employees to gather that is separate from visitor use areas.
- **Construct a dormitory at site of Teal Dorm**
This new dorm, which was also proposed in the 1993 Lake/Bridge Bay DCP/EA, would provide housing approximately 60 rooms for concessions employees that work in the Lake Area. The Teal Dorm would be removed and the new, larger dorm constructed in its place. Construction of this dorm would also provide rooms for those lost with removal of Seagull Dorm as housing.
- **Construct maintenance building for concessions use in concessions' admin area**
Concessions maintenance workers do not currently have adequate workspace in the Lake Area. This building would allow concessions operations, including maintenance of historic buildings, to operate more smoothly and efficiently.
- **Remove personnel office building behind Lake Lodge**
This building, which is located between Seagull Dorm and the employee pub, would be removed under this alternative because it is insufficient for current administrative practices and in poor condition. The function would be relocated within the location, possibly into the renovated employee pub. This project would not result in increased development footprint.
- **Formalize pedestrian walkway for employees between concessions administrative area to Lake Lodge; provide night lighting that meets Night Lighting Standards**
This project would reduce trampling and social trails as employees travel between Lake Lodge and their housing units. Appropriate lighting would make walking through this area safer for employees.

2.5 LAKE HOTEL LOCATION

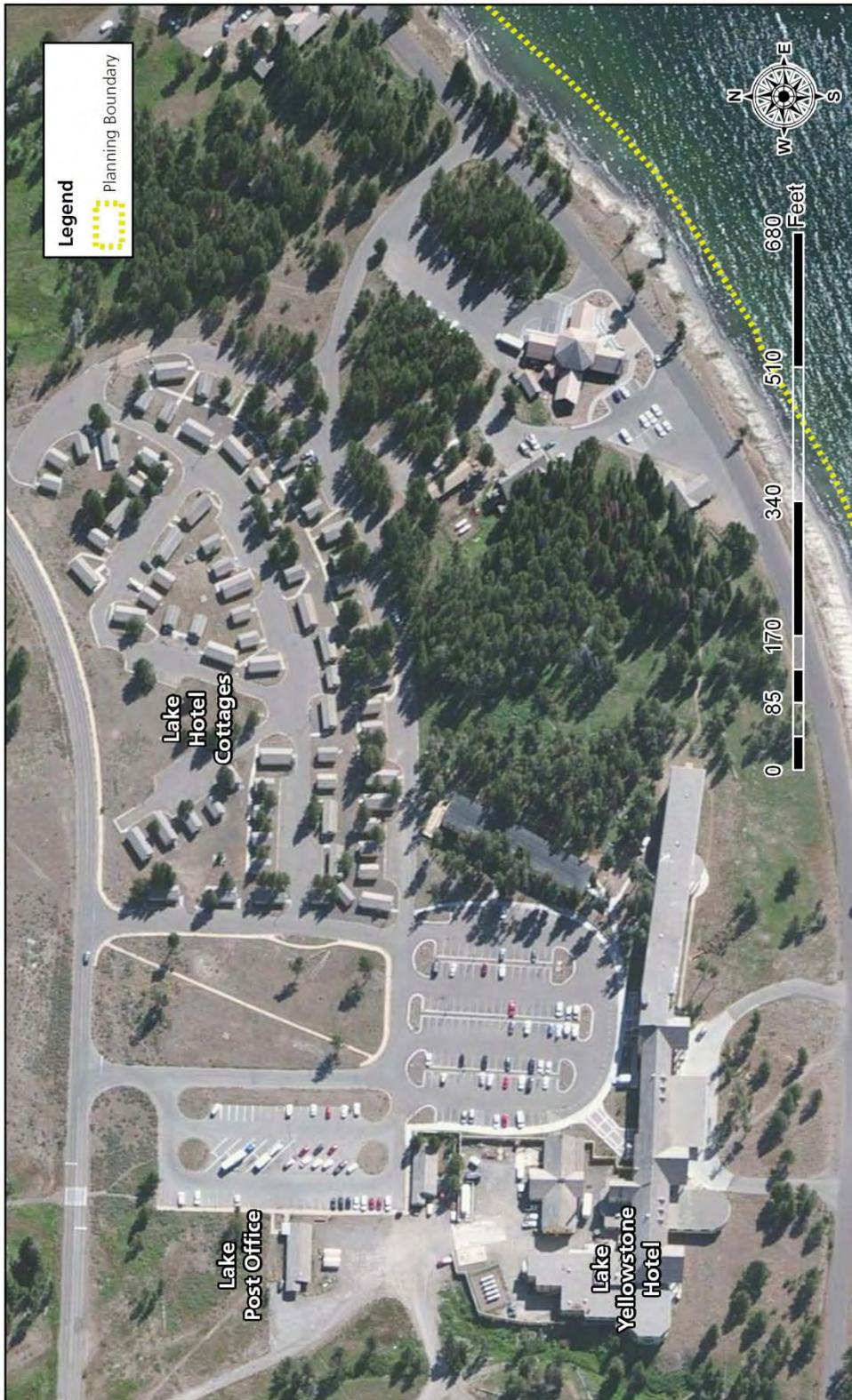


Figure 2-18 Lake Hotel Location: No Action Alternative A

2.5.1 Alternative A (No Action) – Lake Hotel Location

Under Alternative A, the Lake Hotel location would continue to provide support in the form of dining and lodging to visitors. The No Action would continue maintenance and repair of facilities. The following projects from the 1993 Lake/Bridge Bay DCP/EA have not been completed. This plan assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects from the Lake/Bridge Bay DCP/EA:

- Construct new entrance road to front of Lake Hotel, including new intersection for hospital, service station, and post office
- Consolidate Lake Hotel cabins into motel-style buildings
- Rehabilitate and adaptively re-use building next to boiler room
- Redesign and increase Lake Hotel rear parking area
- Redesign circulation in hotel cottage area as a loop (approx. 300' of road construction)
- Remove post office
- Remove winterkeeper's cabin



Figure 2-19 Lake Hotel Location: Planning Zones Alternatives B&C

2.5.2 Alternative B (Preferred) – Lake Hotel Location

Under this alternative, the Lake Hotel location would continue to provide visitor support such as dining, lodging, and postal services. Comprehensive planning components for the Lake Hotel location follow:

Planning zones: This location contains historic, natural, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, natural, and circulation overlay zones for the Lake Hotel location.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 1,900 square feet; which could accommodate projects such as a maintenance facility. There would be no net gain in pavement in this location.

Projects (* **proposed for removal under past planning, changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations**):

- **Develop entry structure adjacent to rear of Lake Hotel to define entrance to structure**
An entry structure would be constructed adjacent to the rear of the Lake Hotel, but would not be physically attached to the hotel. Most visitors arrive at the rear of the hotel, which is not designed as the main entrance to the hotel. This entry structure would complement the front of the hotel and provide a sense of arrival for guests. The construction would take place within the confines of the hotel's rear parking area and be done in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties.
- **Construct breezeway between Lake Hotel and the boiler room**
This project would provide safe passage in inclement weather for concessions employees moving between the hotel and offices located in the boiler room. As with the entry structure, this project would also be done in accordance with the Secretary of the Interior Standards for the Treatment of Historic Properties.
- **Conduct seismic stabilization for the Lake Hotel**
This project would provide life-safety upgrades to the Lake Hotel. Currently, the hotel has no seismic upgrades and is at risk for damage or destruction by a seismic event. There will be specific site disturbance and excavation regarding bore testing for soil conditions both around the exterior perimeter of the hotel and specific excavation locations for a number of footings; foundation walls; removal and relocation of concrete structures such as the laundry transfer dock in the rear of the building; a variety of elevator and Americans with Disabilities Act (ADA) compliant ramp installation locations; construct concrete pad, and shear wall foundations for seismic stability. A temporary contractor's camp, similar to the one at Old Faithful, will be used during the renovation of the Lake Hotel. It would be located within the footprint of the concessioners' administrative area.
- **Construct maintenance building for concessions use behind Lake Hotel**
Concessions maintenance workers do not currently have adequate workspace in the Lake Area. This building would allow concessions operations, including maintenance of historic buildings, to operate more smoothly and efficiently. The building would also be designed and placed so that it provides screening between the hotel and the clinic road.
- **Retain and renovate post office to conform to design standards***
The post office is located within a historic district, but does not conform to design standards in this location. All changes would take place within the building's existing footprint.

- **Retain hotel cottages in current configuration***
Although the 1993 Lake/Bridge Bay DCP determined that the Lake Hotel cottages should be replaced with motel-type units in a ring behind the hotel, this alternative would leave the historic cottages in their current configuration. This alternative contributes to providing a wide range of prices for lodging in the Lake Area and would not impact the proposed National Historic Landmark status of the hotel or the historic district.
- **Retain and rehabilitate the winterkeeper's cabin**
Although this building was proposed for removal under past plans, this alternative proposes to repair and rehabilitate the structure and continue to use it as housing.

2.5.3 Alternative C – Lake Hotel Location

Under this alternative, the Lake Hotel location would continue to provide visitor support such as dining, lodging, and postal services. Comprehensive planning components for the Lake Hotel location follow:

Planning zones: This location contains historic, natural, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, natural, and circulation overlay zones for the Lake Hotel location.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 600 square feet; which could accommodate the rear entry structure to the hotel. There would be no net gain in pavement in this location.

Projects (* Asterisks indicate structures that were proposed for removal under past planning. Changing resource conditions and visitor needs now indicate that it is appropriate to keep these facilities in their current locations.):

- **Retain hotel cottages in current configuration***
Although the 1993 Lake/Bridge Bay DCP determined that the Lake Hotel cottages should be replaced with motel-type units in a ring behind the hotel, this alternative would leave the historic cottages in their current configuration. This alternative contributes to providing a wide range of prices for lodging in the Lake Area and would not impact the proposed National Historic Landmark status of the hotel or the historic district.
- **Remove winterkeeper's residence**
The current winterkeeper's residence (HS-4313) was slated for removal in past plans and therefore has not received funding for its upkeep and is consequently in poor condition and would be removed. The housing will be replaced in the concessions administrative area, providing a separation between employee housing and visitor services.
- **Develop entry structure adjacent to rear of Lake Yellowstone Hotel to define entrance to structure**
An entry structure would be constructed adjacent to the rear of the Lake Hotel, but would not be physically attached to the hotel. Most visitors arrive at the rear of the hotel, which is not designed as the main entrance to the hotel. This entry structure would complement the front of the hotel and provide a sense of arrival for guests. The construction would take place within the confines of the Hotel rear parking area.

2.6 LAKESHORE LOCATION



Figure 2-20 Lakeshore Location: No Action Alternative A

2.6.1 Alternative A (No Action) – Lakeshore Location

Under this alternative, the Lakeshore location would continue to provide support and education to visitors. The no action would continue maintenance and repair of facilities. The following projects from the 1993 Lake/Bridge Bay DCP/EA have not been completed. This plan assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects from the 1993 Lake/Bridge Bay DCP/EA:

- Remove trailers and non-historic housing units behind the hatchery
- Rehabilitate and adaptively use Lake Service Station
- Relocate lakeshore roadway away from shoreline at ranger station
- Create separate pedestrian trail along roadway near the Lake General Store
- Propose a living history exhibit at the hatchery to interpret the park's role in fisheries management
- Remove newer boathouse
- Construct parking for 40 cars, 6 RVs, and 3 buses at the Lake General Store.
- Construct fire station near clinic
- Construct parking for an additional 5 cars at the Lake Ranger Station



Figure 2-21 Lakeshore Location: Planning Zones Alternatives B&C

2.6.2 Alternative B (Preferred) – Lakeshore Location

Under this alternative, the Lakeshore location would continue to support visitor experience as well as provide administrative functions such as housing for NPS employees. Comprehensive planning components for the Lakeshore location follow:

Planning zones: This location contains historic, administrative, natural, development, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, development, and circulation overlay zones for the Lakeshore location.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 13,000 square feet; which can accommodate the projects listed below. There would be a net gain of 36,000 square feet in pavement in this location.

Projects:

- **Construct multiplex housing units to replace transahomes**
Under this alternative, seven transit homes would be demolished and replaced with new multiplex housing for up to 16 bedrooms. The transahomes homes are inadequate for employee housing and nearing the end of their life.
- **Rehabilitate and adaptively re-use the historic Lake Service Station for visitor use**
The 1993 Lake/Bridge Bay DCP/EA proposed that this structure be adaptively re-used; it has not been used as a service station since the 1980s. The structure is currently used by park rangers for storage. However, since it is a historic structure and provides views across Yellowstone Lake, this alternative proposes that it be converted to visitor use. This project may require utility upgrades or additions such as electricity, sewer, and/or water.
- **Modify circulation between the Lake Hotel and Lake General Store**
The preferred alternative for this action contains two options. Both options involve the road between the Lake Hotel and the general store. Regardless of which option is chosen, the road would be converted to a different surface to alert drivers that pedestrians may be in the area. Additionally, to provide pedestrian access all the way to the ranger station, a new one-way lane would be constructed behind the ranger station and the parking would be expanded between the ranger station and the general store to alter vehicle circulation and alleviate potential conflicts with pedestrians. Day-use visitors would be directed to this parking area, which would serve the general store, the renovated Lake Service Station, and the ranger station. Bicycles would still transit from Bridge Bay along the lakeshore and then use the Grand Loop road to access the Fishing Bridge Area. The abandoned road segment that connects Lake to Fishing Bridge would continue as a pedestrian only route. Due to concerns over grizzly bear encounters, bicyclists would not be allowed to use the abandoned road segment.
 - Option 1 (Figure 2-22): Open the road from the Lake General Store to the entrance of the hotel's porte cochere to pedestrian-only traffic. Public vehicles, except for RVs and vehicles with trailers, would be able to access the porte cochere from the west, but would need to turn around to park at the rear of the hotel or access the day-use area. This option would provide options for pedestrians and bicyclists to walk along the lakeshore without potential conflicts with vehicles.
 - Option 2: (Figure 2-23): Open the road from the Lake General Store to the T-intersection southwest of the hotel to pedestrian-only use. Only historic buses

would be able to use the road to access the porte cochere during tour operations. This would provide a safe, welcoming visitor use experience for pedestrians and bicyclists, as well as improve pedestrian safety; currently the only lakeshore route between the hotel and the store is in the roadway.

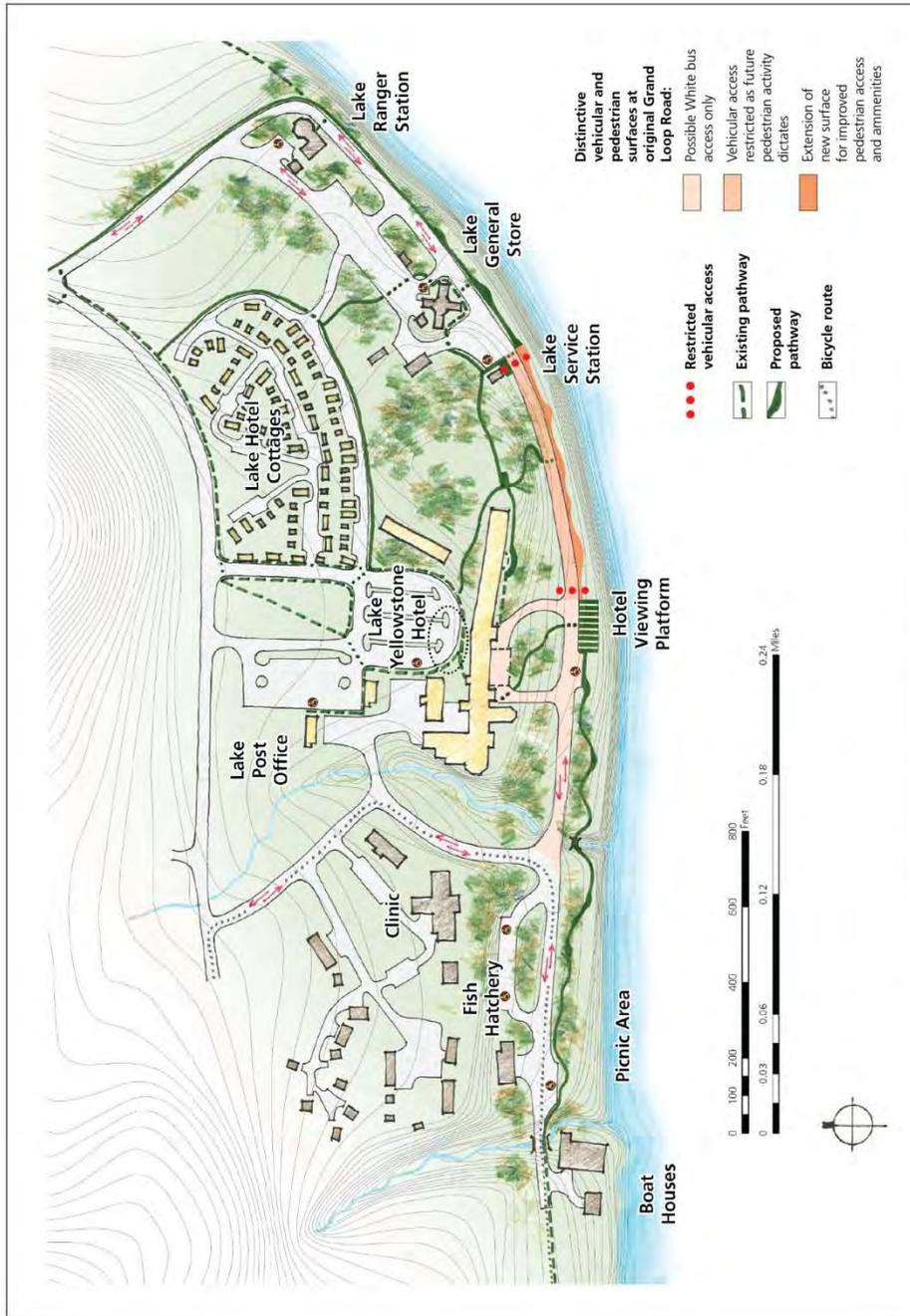


Figure 2-22 Lakeshore Pathway Concept - Alternative B (Preferred)
 In Alternative B vehicular traffic is removed between Lake Yellowstone Hotel Viewing Platform and Lake Service Station, providing a pedestrian-only area

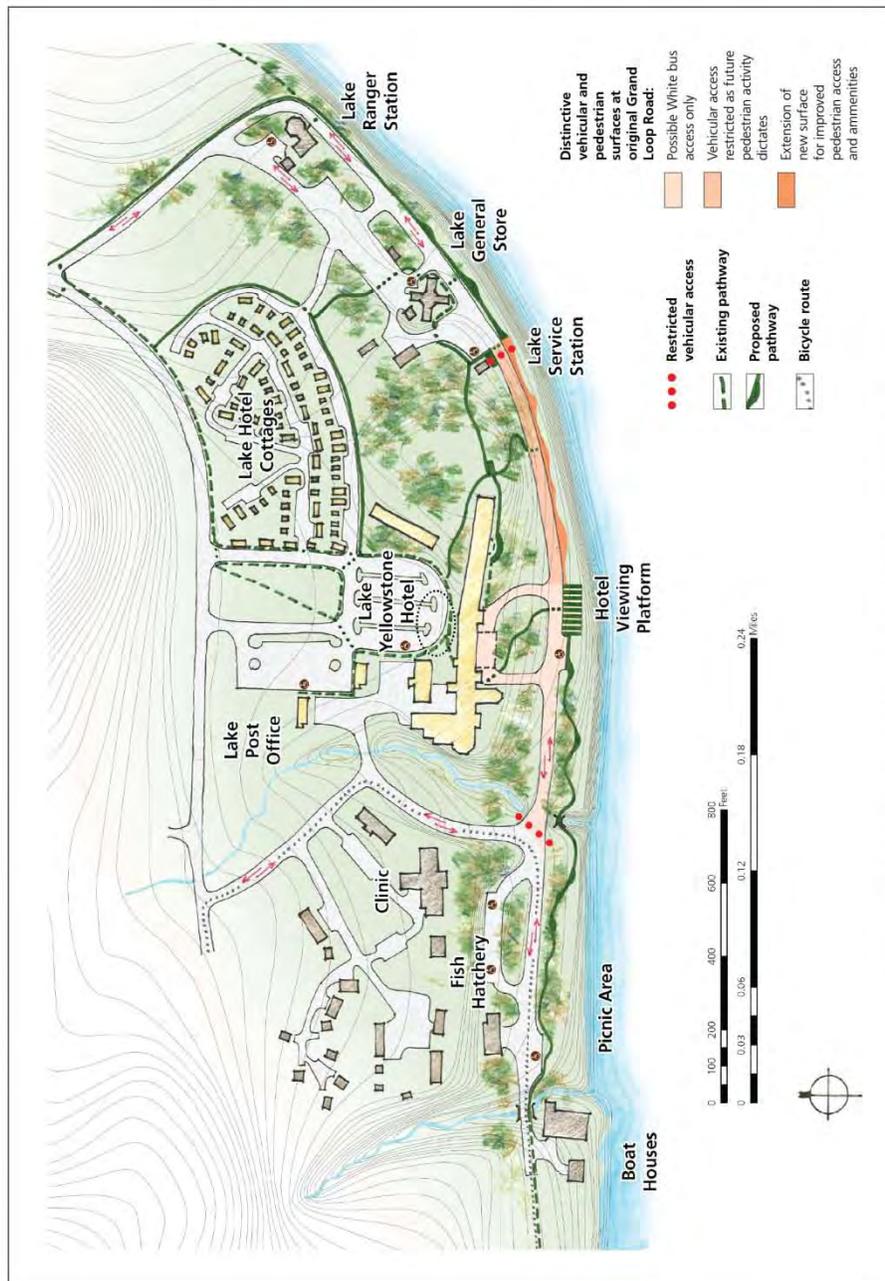


Figure 2-23 Lakeshore Pathway Concept - Sub-Alternative B
 In Sub-Alternative B vehicular traffic is removed from the front of the hotel and along the shore to the Lake Service Station; historic Yellowstone tour buses are allowed access to the porte cochere

- **Construct an entry kiosk (e.g., signage, orientation panels) with pull-out on south side of access road**
 A vehicle pull-out would be constructed near the entrance to the Lake Village. Signs and/or orientation panels would be placed at the pullout to orient visitors to the Lake Area and direct them to their desired destination within the village. This project would help alleviate confusion in the Lake Area, which has been identified as a problem in numerous planning documents.
- **Enlarge the pedestrian viewing platform to replace the existing platform in front of hotel**

The current platform is approximately 10 X 55 feet and is not visually compatible with the Lake Hotel or historic district. The new platform would be approximately 25% larger and placed in the same area as the existing. It would be designed to complement the architecture of the historic hotel, along with increased seating capacity. This alternative also proposes eliminating parking in front of the platform to enhance views to and from the hotel and the lake.

- **Renovate the Lake Ranger Station for year-round occupancy with public space**
Currently, the Lake Ranger Station is not suitable for winter occupation. Consequently, rangers move offices during the winter to temporary offices. Additionally, the building is not open to the public. This alternative proposes that the necessary improvements be done to allow rangers to use the space year-round and the public visit it to obtain backcountry permits, as it was historically used until the 2000s. This project would entail mainly internal (i.e., insulation, HVAC, etc) renovations with some exterior roof repair.
- **Convert hatchery building to visitor use with limited parking and utilities**
This project may include upgrades to or installation of utilities and increased visitor day use to the area. Seasonal closures would remain in effect. As part of this project a lift station would be constructed to allow restrooms and potable water.
- **Enhance picnic area near Fish Hatchery**
This project would include increased parking and picnic facilities while maintaining seasonal closures.
- **Renovate clinic to conform with design standards**
Under the plan, interior and exterior renovations to the clinic would occur. The building footprint would remain the same.
- **Retain both boathouses**
The Lake/Bridge Bay DCP/EA proposed removing the newer boathouse. However, both structures are currently used by the NPS to house boats in the winter and for general storage. Because of changing resource conditions near Hatchery Creek, there is no longer a need to remove either structure, especially since they both still serve their original purpose.
- **Construct Emergency Services Building (ESB) near clinic**
The ESB would house emergency response vehicles, such as ambulances or fire trucks. Locating some of these vehicles near the clinic would increase efficiency in response time during medical events.

2.6.3 Alternative C – Lakeshore Location

Under this alternative, the Lakeshore location would continue to support visitor experience as well as provide administrative functions such as housing for NPS employees. Comprehensive planning components for the Lakeshore location follow:

Planning zones: This location contains historic, administrative, natural, development, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, development, and circulation overlay zones for the Lakeshore location.

- **Planning prescriptions:** The acceptable net gain in development footprint would be 11,000 square feet; which can accommodate the projects listed below. There would be a net loss of 1,100 square feet in pavement in this location.

Projects:

- **Construct multiplex housing units to replace transahomes**
Under this alternative, new multiplex housing for up to 16 bedrooms would be constructed for NPS employees north of the hatchery historic district. The transahomes are inadequate for employee housing and nearing the end of their life.
- **Rehabilitate and adaptively re-use the historic Lake Service Station building for visitor use**
The 1993 Lake/Bridge Bay DCP/EA proposed that this structure be adaptively re-used; it has not been used as a service station since the 1980s. The structure is currently used by park rangers for storage. However, since it is a historic structure and provides views across Yellowstone Lake, this alternative proposes that it be converted to visitor use. This project may require utility upgrades or additions such as electricity, sewer, and/or water.
- **Modify circulation between the Lake Hotel porte cochere entrance and the General Store**
This project concerns the roadway between the Lake Hotel porte cochere entrance and the General Store and aims to increase pedestrian safety and enhance the visitor experience along the lakeshore. The road would be converted to a different surface to alert drivers that pedestrians may be in the area. Additionally, to provide pedestrian access all the way to the ranger station, vehicular traffic would be one way, east to west, along the lakeshore. This would allow room for a pedestrian walkway along the lakeshore. Bicycles would still transit from Bridge Bay along the lakeshore and then use the Grand Loop road to access the Fishing Bridge Area. The abandoned road segment that connects Lake to Fishing Bridge would continue as a pedestrian-only route. Due to concerns over grizzly bear encounters, bicyclists would not be allowed to use the abandoned road segment.

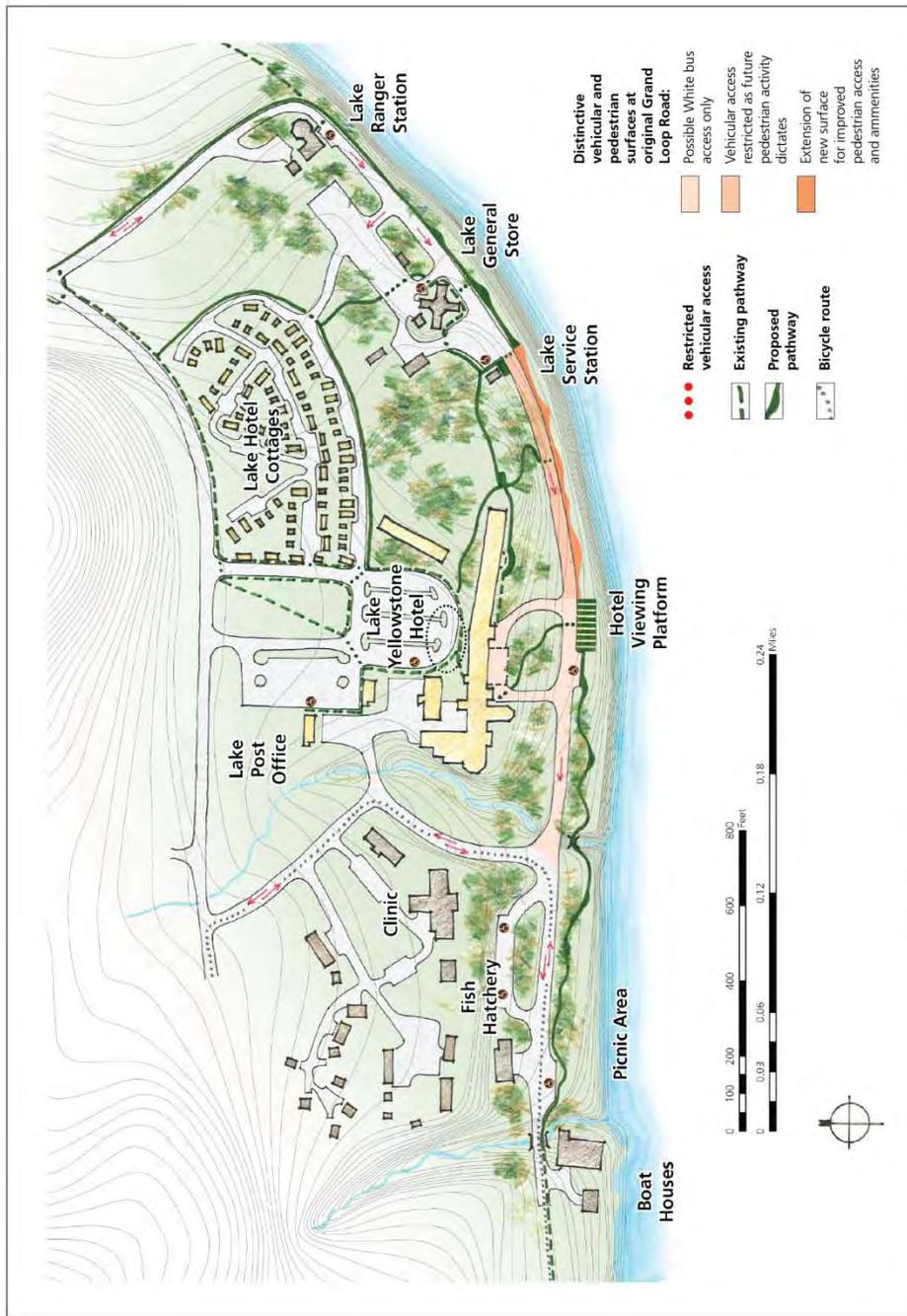


Figure 2-24 Lakeshore Pathway Concept - Alternative C

In Alternative C one-way vehicular traffic is allowed between Lake Service Station and Lake Yellowstone Hotel, travelling east to west

- **Construct an entry kiosk (e.g., signage, orientation panels) with pull-out on south side of access road**

A vehicle pull-out would be constructed near the entrance to the Lake Village. Signs and/or orientation panels would be placed at the pull-out to orient visitors to the Lake Area and direct them to their desired destination within the village. This project would help alleviate confusion in the Lake Area, which has been identified as a problem in numerous planning documents.

- **Replace the existing pedestrian platform in front of hotel with a larger one**
The current platform is approximately 10 X 55 feet and is not visually compatible with the Lake Yellowstone Hotel or historic district. The new platform would be approximately 25% larger and placed in the same area as the existing. It would be designed to complement the architecture of the historic hotel, along with increased seating capacity. This alternative also proposes eliminating parking in front of the platform to enhance views to and from the hotel and the lake.
- **Renovate the Lake Ranger Station for summer occupancy with public space**
Currently, the Lake Ranger Station is not suitable for public visitation. This alternative proposes that the necessary improvements be done to allow rangers to use the space in the summer and the public visit it to obtain backcountry permits, as it was historically used until the 2000s. This project would entail mainly internal (i.e., insulation, HVAC, etc) renovations with some exterior roof repair.
- **Enhance picnic area near Fish Hatchery**
This project would include increased parking and picnic facilities while maintaining seasonal closures.
- **Construct a floating pier near the picnic area**
This project would construct a floating pier near the picnic area that would be removed during winter months when the lake freezes. The pier would provide additional access to the water for visitors as well as views across the lake and back towards the developed area.
- **Retain and renovate both boathouses for visitor use**
In this alternative, both boathouses would be converted to visitor-use functions. The newer boathouse was proposed for removal in the 1993 Lake/Bridge Bay DCP/EA, but changing resource conditions indicate that this is no longer necessary. As part of this project a lift station would be installed to provide potable water to the boathouses.

2.7 BRIDGE BAY LOCATION



Figure 2-25 Bridge Bay Location: No Action Alternative A

2.7.1 Alternative A (No Action) – Bridge Bay Location

Under this alternative, the Bridge Bay location would continue to provide support and education to visitors. The No Action would continue maintenance and repair of facilities. The following projects from the 1993 Lake/Bridge Bay DCP/EA have not been completed. This plan assumes that these projects will be implemented in the future; their impacts to resources are analyzed in Chapter 4 of this document.

Projects:

- Add new laundry and shower facility to camper services building or elsewhere within the campground
- Expand boat repair shop
- Expand marina and camper concession service store to provide additional sales space
- Repair marina bulkhead
- Dredge mouth of Bridge Bay
- Reduce fuel storage area and move nearer to fueling dock area
- Redesign interior of marina ranger station to improve efficiency
- Construct new residence near ranger station
- Install larger buried water distribution line at Bridge Bay to ensure adequate fire protection
- Improve circulation routes (road rerouted on Loop A, entrance road moved north slightly)
- Rehabilitate amphitheater
- Plant vegetation between sites for separation
- Develop trailhead with parking and an interpretive exhibit at Grand Loop Road to facilitate use of Natural Bridge trail
- Restore disturbed areas along Grand Loop Road



Figure 2-26 Bridge Bay Location: Planning Zones Alternatives B&C

2.7.2 Alternative B (Preferred) – Bridge Bay Location

Under this alternative, the Bridge Bay location would continue to provide support to visitors. Comprehensive planning components for the Bridge Bay location follow:

Planning zones: This location contains historic, administrative, natural, development, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, development, and circulation overlay zones.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 26,900 square feet; which could accommodate projects such as NPS storage facilities and shower services at the campground. The acceptable net change in development footprint for pavement would 200 square feet.

Projects:

- **Construct 2 shower facilities in campground**
There are currently no showers in the Bridge Bay Campground, which consists of 425 spaces. Visitors often spend multiple days in the Bridge Bay location and have to travel to the Fishing Bridge RV Park to use showers there, increasing local area traffic. Shower facilities would be constructed within the boundary of the Bridge Bay Campground.
- **Construct a shower and laundry facility near the marina**
This facility would provide showers and laundry to visitors at both the campground and marina. Visitors often spend multiple days in the Bridge Bay location, and have to travel to Fishing Bridge for showers and Lake Lodge for laundry facilities. This project would enhance visitor experience and would take place within the marina's existing footprint.
- **Relocate the marina fuel pump**
Currently, the fuel pump is over the marina's waters, leading to occasional fuel spills into the lake. This project would move the pump to a location adjacent to the marina, but over ground. Boats would still be able to fuel up from the water, but fuel spills into the water would decrease.
- **Install electrical hook-ups in Loops A-D of the campground**
Currently, the only electrical hook-ups in the campground are used by campground employees, who live in RVs the entire summer. Therefore, visitors in RVs run generators for electricity. This leads to noise pollution in the campground. This project would decrease noise pollution and enhance visitor experience.
- **Construct fence to separate humans and bears from the utility corridor near H Loop of the campground**
The utility corridor runs between H Loop and the rest of the campground, providing a level, treeless space that campers sometimes use for their tents and bears sometimes use as they move through the area. This could lead to a conflict between bears and humans. Additionally, there is the risk of the overhead powerlines falling on campers or tent poles coming into contact with the powerlines, causing injury or loss of life. This project would install a fence along the edges of the corridor to dissuade campers from setting up their tents in the open space, thus alleviating safety and resource concerns.
- **Improve marina bulkhead**
The bulkhead in the marina needs standard repair and improvement. The improvements would consist of shoring up the existing bulkhead within its present footprint.

- **Dredge marina entry**
The marina entry is becoming shallower due to natural silting in Yellowstone Lake. The current depth is 4 feet, which is inadequate for some NPS and visitor boats. This project would dredge the marina entry to provide adequate depth. This project would remove approximately 2,400 cubic yards of sediment from the mouth of the marina. The spoils would be disposed of in an approved landfill facility.
- **Retain campground circulation in current configuration**
The 1993 Lake/Bridge Bay DCP/EA proposed that the A Loop road be moved to improve circulation. This project was not completed, but other changes to adjacent roads have alleviated circulation problems in the A Loop, thus negating the need for this project.
- **Rehabilitate campground amphitheater**
This project, which was proposed in the 1993 Lake/Bridge Bay DCP/EA, involves standard upgrades to the campground amphitheatre. Modifications would not change the amphitheatre capacity or footprint.
- **Utilize darker colors to blend the transfer station building**
The transfer building is located in the trees north of Bridge Bay campground. It is not accessed by visitors, but is visible from several points along the Grand Loop Road. A darker paint color would blend this administrative function within the surrounding forest and thus make it less apparent to the visitor.
- **Construct storage facilities at the transfer station**
There is currently inadequate storage for NPS maintenance operations in the Lake Area. This problem would increase when the hatchery, which is used partially for storage, is converted to visitor use. The storage facilities would be constructed in the transfer station location and would not expand the location's boundaries.

2.7.2 Alternative C – Bridge Bay Location

Under this alternative, the Bridge Bay location would continue to provide support to visitors. Comprehensive planning components for the Bridge Bay location follow:

Planning zones: This location contains historic, administrative, natural, and circulation overlay planning zones.

- **Design Standards:** See Figure 2-5 and Appendix C for specific design standards for historic, administrative, natural, and circulation overlay zones.
- **Planning prescriptions:** The acceptable net gain in development footprint would be 28,800 square feet; which could accommodate projects such as showers and laundry buildings. The acceptable net change in development footprint for pavement would be 200 square feet.

Projects:

- **Construct three shower and laundry facilities in the campground/marina**
This facility would provide showers and laundry to visitors at both the campground and marina. Visitors often spend multiple days in the Bridge Bay location, and have to travel to Fishing Bridge for showers and Lake Lodge for laundry facilities. This project would enhance visitor experience and would take place within the campground's existing footprint.
- **Relocate the marina fuel pump**
Currently, the fuel pump is over the marina's waters, leading to occasional fuel spills into

the lake. This project would move the pump to a location adjacent to the marina, but over ground. Boats would still be able to fuel up from the water, but fuel spills into the water would decrease.

- **Install electrical hook-ups in Loops A-D of the campground**
Currently, the only electrical hook-ups in the campground are used by campground employees, who live in RVs the entire summer. Therefore, visitors in RVs run generators for electricity. This leads to noise pollution in the campground. This project would decrease noise pollution and enhance visitor experience.
- **Move utility corridor to outside the campground footprint**
The utility corridor currently runs between H Loop and the rest of the campground, providing a level, treeless space that campers sometimes use for their tents and bears sometimes use as they move through the area. This could lead to a conflict between bears and humans. Additionally, there is the risk of the overhead powerlines falling on campers or tent poles coming into contact with the powerlines, causing injury or loss of life. This project would relocate the utility corridor to outside the campground footprint, thus alleviating safety and resource concerns.
- **Improve marina bulkhead**
The bulkhead in the marina needs standard repair and improvement. The improvements would consist of shoring up the existing bulkhead within its present footprint.
- **Dredge marina entry**
The marina entry is becoming shallower due to natural silting in Yellowstone Lake. The current depth is 4 feet, which is inadequate for some NPS and visitor boats. This project would dredge the marina entry to provide adequate depth. This project would remove approximately 2,400 cubic yards of sediment from the mouth of the marina. The spoils would be disposed of in an approved landfill facility.
- **Construct storage facilities at the transfer station**
There is currently inadequate storage for NPS maintenance operations in the Lake Area. This problem would increase when the hatchery, which is used partially for storage, is converted to visitor use. The storage facilities would be constructed in the transfer station location and would not expand the location’s boundaries.

Table 2-4: Summary of alternatives by location

Location	Alternative A (no action)	Alternative B (Preferred)	Alternative C
Fishing Bridge	<p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Removal</p> <ul style="list-style-type: none"> • Remove Fishing Bridge Auto Repair Shop • Remove Fishing Bridge Auto Service Station • Remove all concessioner employee housing 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Retention/Upgrade</p> <ul style="list-style-type: none"> • Retain, rehabilitate, and expand Fishing Bridge Auto Repair Station by approximately 600 square feet • Retain and rehabilitate Fishing Bridge Auto Service Station • Retain and rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization • Retain and expand YPSS dorm 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Retention/Upgrade</p> <ul style="list-style-type: none"> • Retain and rehabilitate Fishing Bridge Auto Repair Station • Retain and rehabilitate Fishing Bridge Auto Service Station • Retain and rehabilitate Fishing Bridge Boy’s Dorm for seismic stabilization • Retain and expand YPSS dorm by approximately 40% • Retain remaining cabins and

<ul style="list-style-type: none"> Remove remaining cabins and storage sheds Remove Fishing Bridge warming hut <p>Other Facility Upgrade</p> <ul style="list-style-type: none"> Create seasonal hiking/biking trail from Bridge Bay to Fishing Bridge along lakeshore (partially completed) 	<p>by approximately 40%</p> <ul style="list-style-type: none"> Retain remaining cabins and storage sheds Retain and renovate Fishing Bridge warming hut <p>Facility Removal</p> <ul style="list-style-type: none"> Maintain fire camp behind Fishing Bridge store until replacement location is determined Reclaim/restore native vegetation behind General Store <p>Other Facility Upgrade</p> <ul style="list-style-type: none"> Widen road between RV Park and Bridge to allow for turning lane into RV Park Replace the water tank and water lines throughout Fishing Bridge location Improve pedestrian connection between General Store and Museum Renovate/infill Fishing Bridge RV Park within existing footprint to accommodate a mixture of longer and shorter oversized vehicles (southern loops would accommodate shorter oversized vehicles, northern loops would accommodate longer vehicles) Construct showers in RV Park Renovate camper services building within existing footprint Modify Pelican Creek Nature Trail to protect rare plant habitat 	<p>storage sheds</p> <ul style="list-style-type: none"> Maintain Fire Camp behind General Store Retain and renovate Fishing Bridge warming hut <p>Other Facility Upgrade</p> <ul style="list-style-type: none"> Widen road between RV Park and Bridge to allow for turning lane into RV Park Replace the water tank and water lines throughout Fishing Bridge location Improve pedestrian connection between General Store and Museum Renovate/infill Fishing Bridge RV Park within existing footprint to accommodate longer oversized vehicles (all loops accommodate longer oversized vehicles) Construct showers in RV Park Renovate camper services building and parking within existing footprint
<p>Administrative</p> <p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> Construct 17 2-3 bedroom units to accommodate year-round employees Construct 58 efficiency units for seasonal employees Expand maintenance and storage facilities Enlarge or replace current fire station in the admin. Area 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> Construct 40 bedrooms in multiplex housing units Replace Utah Dorm Consolidate and expand maintenance and storage facilities Construct offices, Emergency Services Building Update, improve, and expand utilities throughout entire Lake Area Construct community/recreation center 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> Construct 20 bedrooms in multiplex housing units Replace Utah Dorm Consolidate and expand maintenance and storage facilities Construct offices, Emergency Services Building Update, improve, and expand utilities throughout entire Lake Area Remove garbage and recycling frequently, in order to keep out

	<ul style="list-style-type: none"> • Bury new utility lines • Insulate or bury new waterlines below normal frost line • Construct NPS community center, playground facilities, picnic area, and trail network <p>Facility Removal</p> <ul style="list-style-type: none"> • Remove Utah Dorm <p>Facility Relocation</p> <ul style="list-style-type: none"> • Replace housing units from hatchery in NPS Admin location • Relocate carpentry, electrical, and plumbing shops into larger, well-constructed facilities 	<ul style="list-style-type: none"> • Construct animal-proof recycling and garbage transfer station 	<p>animals, even in winter</p>
<p>Lake Lodge</p>	<p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Relocation/Removal</p> <ul style="list-style-type: none"> • Consolidate Lake Lodge cabins into motel-type buildings located approximately 100 yards from Lodge Creek • Remove Seagull Dorm • Remove employee pub • Move road nearest Lodge Creek away from creek • Relocate existing cabin to Lodge area to accommodate hotel winterkeeper • Relocate post office to already disturbed site near entrance of Lake developed area <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Construct employee pub and recreation center in center of housing area • Construct vehicle turnaround at end of Lodge road • Construct small maintenance building and employee parking area behind Lodge • Construct 60-room dormitory at site of Teal dorm • Remove RV sites near Teal dorm to make room for employee parking • Construct new auto service station • Construct new auto repair 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Relocation/Removal</p> <ul style="list-style-type: none"> • Move Lodge cabins away from Lodge Creek to alternative location (approximately 100 yards from Lodge Creek) • Remove Seagull Dorm • Remove Teal Dorm <p>Facility Retention</p> <ul style="list-style-type: none"> • Retain and renovate Pub facility • Retain Lodge Cabin road in current location <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Construct employee recreation hall in concessions' admin area • Construct an approximately 60-room dormitory at site of Teal dorm • Formalize pedestrian walkway for employees between Concessions Administrative Area to Lake Lodge area • Provide night lighting for pedestrian pathways within developed area that meets Night Lighting Standards 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Removal</p> <ul style="list-style-type: none"> • Remove personnel office building behind Lake Lodge • Remove Teal Dorm <p>Facility Retention</p> <ul style="list-style-type: none"> • Maintain Lake Lodge cabins in current location • Retain and re-use Seagull Dorm • Retain and renovate Pub facility for adaptive reuse • Retain Lodge Cabin road in current location <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Construct an approximately 60-room dormitory at site of Teal dorm • Construct new employee pub in concessions admin area • Formalize pedestrian walkway for employees between Concessions Administrative Area to Lake Lodge area • Provide night lighting for pedestrian pathways within developed area that meets Night Lighting Standards • Construct winterkeeper's cabin in concessions' admin area • Construct maintenance building for concessions use in concessions' admin area

	<p>shop</p> <ul style="list-style-type: none"> • Construct two new dormitories, for service station and Hamilton Stores employees behind new auto repair station, with associated parking for 85 cars. 		
Lake Hotel	<p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Relocation/Removal</p> <ul style="list-style-type: none"> • Consolidate Lake Hotel cottages into motel-style buildings • Remove the winterkeeper’s cabin <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Rehabilitate and adaptively re-use building next to boiler room • Redesign circulation in hotel cabin area as a loop (approx. 300’ of road construction) • Redesign and increase Lake Hotel rear parking area 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Retention</p> <ul style="list-style-type: none"> • Retain hotel cottages in current configuration • Retain and rehabilitate winterkeeper’s cabin <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Develop entry adjacent to rear of Lake Hotel to define entrance to structure • Construct breezeway between hotel and boiler room • Provide seismic stabilization for Lake Hotel • Install emergency generator for Lake Hotel • Construct maintenance building for concessions use behind Lake Hotel • Renovate Post Office to conform to design standards 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Removal/Relocation</p> <ul style="list-style-type: none"> • Remove winterkeeper’s cabin and replace in concession’s admin area <p>Facility Retention</p> <ul style="list-style-type: none"> • Retain hotel cottages in current configuration <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Develop entry adjacent to rear of Lake Hotel to define entrance to structure
Lakeshore	<p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Construct new entrance road to front of Lake Hotel, including new intersection for hospital, service station, and post office; direct hotel guests to front of hotel for registry • Relocate lakeshore roadway away from shoreline at ranger station • Create separate pedestrian trail along roadway near the general store • Rehabilitate and adaptively use Lake service station • Construct parking for 40 cars, 6 RVs, and 3 buses at general 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Create an entry kiosk (signage, orientation panels) at pull-out on south side of access road • Convert current road to pedestrian-only traffic between Lake Hotel and Lake General Store, no parking in front of hotel, create pedestrian/bike pathway along lakeshore, historic bus access to porte cochere • Rehabilitate and adaptively use Lake service station • Replace pedestrian viewing platform in front of Hotel • Renovate Lake Ranger Station offices for year-round occupancy with public space • Construct new road behind Ranger Station to allow one- 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Create an entry kiosk (signage, orientation panels) at pull-out on south side of access road • Convert current road to one-way vehicular traffic between Lake Hotel and Lake General Store, no parking in front of hotel, create pedestrian/bike pathway along lakeshore • Rehabilitate and adaptively use Lake service station • Replace pedestrian viewing platform (partially covered) overlooking lake in front of Hotel • Enhance picnic area near Hatchery structure (with seasonal closures to protect grizzly bears) • Construct floating pier near

	<p>store.</p> <ul style="list-style-type: none"> • Construct parking for additional 5 cars at ranger station • Propose a living history exhibit at Hatchery to interpret park's role in fisheries management • Construct fire station near hospital <p>Facility Removal</p> <ul style="list-style-type: none"> • Remove newer boathouse • Remove trailers and non-historic housing units 	<p>way circulation in day-use area</p> <ul style="list-style-type: none"> • Construct/improve parking between ranger station and general store • Adaptive use of hatchery for visitor use • Construct lift station to enhance adaptive use of hatchery • Enhance picnic area near Hatchery structure (with seasonal closures) • Rehabilitate hospital structure to conform with design standards • Construct Emergency Services Building near clinic • Construct 16 bedrooms equivalent in multiplex housing to replace transahomes in fisheries area <p>Facility Retention</p> <ul style="list-style-type: none"> • Retain both boathouses • Retain historic housing 	<p>hatchery to allow additional use and views of Lake</p> <ul style="list-style-type: none"> • Construct 16 bedrooms equivalent in multiplex housing to replace transahomes in fisheries area <p>Facility Retention</p> <ul style="list-style-type: none"> • Retain and renovate both boathouses for visitor-use
<p>Bridge Bay</p>	<p>A comprehensive plan for the Lake Area is not developed and the Park would continue to rely on the 1974 Master Plan and the 1988 and 1994 Development Concept Plans for planning guidance. Projects remaining from the past plans include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Rehabilitate amphitheater • Plant vegetation between sites for separation • Add new laundry and shower facility to camper services building • Improve circulation routes (road rerouted on Loop A, entrance road moved north slightly) • Construct new residence near ranger station • Expand boat repair shop • Expand marina and camper concession service store to provide additional sales space • Repair marina bulkhead • Re-dredge mouth of Bridge Bay • Reduce fuel storage area and move nearer to fueling dock area • Redesign interior of marina ranger station to improve efficiency 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Construct shower facilities in campground • Keep campground circulation in current configuration • Rehabilitate campground amphitheater • Install electricity in Loops A-D • Construct fence to separate humans and bears from utility corridor near H Loop of the Bridge Bay campground • Utilize darker colors to blend transfer station buildings • Construct shower/laundry facility near marina • Relocate fuel pump at marina • Repair marina bulkhead • Re-dredge mouth of Bridge Bay • Construct storage facilities at transfer station 	<p>Develop Comprehensive Plan, building upon past planning efforts and establish acceptable limits of change. Projects include:</p> <p>Facility Upgrade</p> <ul style="list-style-type: none"> • Install electric hook-ups in Loops A-D of campground • Move utility corridor near H Loop to outside campground to protect humans and grizzly bears • Construct 3 shower and laundry facilities for visitor use in campground/marina • Relocate fuel pump at marina • Repair marina bulkhead • Re-dredge mouth of Bridge Bay • Construct storage facilities at transfer station

- Install larger buried water distribution line at Bridge Bay to ensure adequate fire protection
- Develop trailhead with parking and an interpretive exhibit at Grand Loop Road facilitate use of Natural Bridge trail
- Restore disturbed areas along Grand Loop Road

Table 2-5: How alternatives meet the objectives

Objectives	Alternative A	Alternative B	Alternative C
<p>Protect natural ecosystem processes while reducing human-induced changes to the natural environment.</p>	<p>The consolidation of cabins and relocation of the road away from Lodge creek would help protect bears by reducing the potential for conflicts. The removal of NPS and concessions overnight lodging in the Fishing Bridge area would also help to reduce potential impacts but would transfer impacts to other areas. Construction of a service station, repair shop, two dorms, and a post office would require removal of approximately four acres of trees and expand into an unoccupied meadow. This alternative would increase the human footprint in the Lake Area. This alternative partially meets this objective.</p>	<p>The consolidation of cabins within 100 yds of Lodge creek and installation of fencing in the Bridge Bay campground would help protect bears by reducing the potential for conflicts. The modification of the Pelican Creek Nature Trail would help protect rare plant habitat. All of the projects in this alternative would take place within developed zones of the Lake Area. This alternative would meet this objective.</p>	<p>The consolidation of cabins within 100 yds of Lodge creek and the relocation of the utility corridor around the Bridge Bay campground would help protect bears by reducing the potential for conflicts. All of the projects in this alternative would take place within developed zones of the Lake Area. This alternative would meet this objective.</p>
<p>To the maximum extent practicable, preserve and protect cultural resources for current and future generations.</p>	<p>This alternative would remove 129 historic structures in the lake area. With a Memorandum of Agreement in place, this alternative would result in moderate impacts to cultural resources. This alternative would not meet this objective.</p>	<p>This alternative would remove one historic structure (Seagull Dorm) that is in poor condition and not suitable for housing. Historic structures throughout the lake area would be rehabilitated under this alternative. Three unused historic structures would be adaptively used. This alternative would meet this objective.</p>	<p>This alternative would remove two historic structures that are in poor condition and not suitable for housing/offices. The Lake Hotel winterkeeper’s residence and Lake personnel office building would be removed under this alternative. Historic structures throughout the Lake Area would be rehabilitated under this alternative. Three unused historic structures would be adaptively used. This alternative would meet this objective.</p>
<p>Ensure visitors facilities support necessary and appropriate levels of service and enhance visitor experience in the Lake Area.</p>	<p>Under this alternative vehicular wayfinding would be improved as well as the vehicle-pedestrian conflict at the lakeshore would be addressed. These conflicts in the Fishing Bridge area would not be addressed. This alternative would partially meet the objective.</p>	<p>With improvements to vehicle and pedestrian circulation, wayfinding, and visitor support facilities this alternative meets the objective.</p>	<p>With improvements to vehicle and pedestrian circulation, wayfinding, and visitor support facilities this alternative meets the objective.</p>
<p>Preserve and, where possible, improve the natural scenery and soundscapes.</p>	<p>This alternative would consolidate housing and rehabilitate areas around the Lake Area. This alternative would meet this objective.</p>	<p>The conversion of the road in front of the hotel to pedestrian and improvements to the viewing platform would improve viewsheds. The road conversion would reduce automobile use along the</p>	<p>The conversion of the road in front of the hotel to pedestrian and improvements to the viewing platform would improve viewsheds. This alternative would meet this objective.</p>

Enhance Park operations to better serve visitors and protect natural resources.	Under this alternative, the water main in the Fishing Bridge area would not be replaced and leaks and spot repairs would continue to occur. The construction of maintenance facilities, dredging and marina bulkhead improvement would enhance park operations. This alternative partially meets this objective.	lakeshore and improve soundscapes. This alternative would meet this objective. The construction and upgrade of facilities within the administrative area and water main replacement meets this objective. The ESB would provide enhanced fire protection and maintenance facilities would be consolidated.	The construction and upgrade of facilities within the administrative area and water main replacement meets this objective.
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2.3 ALTERNATIVES CONSIDERED BUT DISMISSED

One alternative was considered for inclusion in the Lake Area Comprehensive Plan, but was dismissed from further analysis for the following reasons.

No Further Development Alternative: An alternative that examined no further change to visitor services, facilities, and utilities was considered for inclusion in the LACP/EA. Five objectives of the LACP/EA are listed in Chapter 1. The following bullets list the objectives and how this alternative meets or does not meet the objectives:

- Protect natural ecosystem processes, while reducing human-induced changes to the natural environment. This alternative would partially meet this objective. While no construction or changes to the Lake Area would mean fewer staff and visitor use, the Lake Lodge cabins would not be relocated from Lodge Creek and the potential for grizzly-human interactions would continue.
- To the maximum extent practicable, preserve and protect cultural resources for current and future generations. This objective would not be met with this alternative. As historic structures age periodic restoration is required. Also, in cases where historic structures fail (e.g., Fishing Bridge Auto Repair Shop) major restoration/reconstruction must occur.
- Ensure visitor’s facilities support necessary and appropriate levels of service and enhance visitor experience in the Lake Area. No further change would not support this objective. Numerous shortcomings have been identified and under this alternative those needs would not be addressed.
- Preserve, and where possible, improve the natural scenery and soundscapes. This objective would be partially met. With no change, scenery and soundscapes would be preserved, however no improvements would be made.
- Enhance Park operations to better serve visitors and protect natural resources. This objective would not be met with this alternative. With no change the NPS can do little to enhance Park operations to better serve visitors and protect natural resources.

In order to continue to support those who visit this portion of the park with the existing range of visitor services in a way that preserves and even improves natural, cultural, and visual resources, changes to development would have to be proposed.

2.4 THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

According to the Department of the Interior regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative “. . .that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative.”

It has been determined that the No Action Alternative, Alternative A, would have considerable environmental impacts compared to the other action alternatives. Alternative A would have little effect on the biological and physical environment but would have an adverse effect on cultural resources. Under this alternative 129 historic structures would be removed. The consolidation of cabins and relocation of the road away from Lodge Creek would help protect bears by reducing the potential for conflicts. The removal of all NPS and concessions overnight lodging in the Fishing Bridge area would also help to reduce potential impacts but would transfer impacts to other areas. Construction of a service station, repair shop, two dorms, and a post office would require removal of approximately four acres of trees and expand into an unoccupied meadow. This alternative would increase the human footprint in the Lake Area. Because of the impacts associated with Alternative A, it is not the environmentally preferred alternative

Alternative B and C both offer benefits in the areas of conservation, restoration, and interpretation and therefore, these alternatives are consistent with fulfilling the criteria listed under Section 101 of NEPA. Alternative B proposes less building and pavement footprint than Alternative C (12.5 acres vs. 14.2 acres). Alternative B would remove one historic structure (Seagull Dorm), whereas Alternative C would remove two (Winterkeeper’s residence and Lodge personnel office). Both alternatives would rehabilitate historic structures throughout the Lake Area. Removal of Lodge cabins closest to Lodge Creek would occur under Alternative B, whereas Alternative C would leave the cabins in place with the current seasonal closures. Both alternatives attempt to address a potential human-bear conflict in the Bridge Bay Campground. Alternative B proposes fencing to keep visitors out of a powerline corridor, which is often used by bears. Alternative C proposes moving the powerline so it is routed around the campground. Selecting the environmentally preferred alternative need not be the same as “preferred alternative” for implementation. However, based on the analysis in this EA, Alternative B, as well as being the preferred alternative, is also in this case the environmentally preferred alternative. This determination is made not only due to the improvements and upgrades that would resolve the natural and cultural resource and safety impacts discussed above, but also due to the adoption of buildable planning zones, planning prescriptions, and design standards.