

## **CHAPTER IV ENVIRONMENTAL EFFECTS OF THE ALTERNATIVES**

The following is a description of predicted environmental effects of each alternative. As noted in Chapter 1, the analysis of the environmental effects is based on the issues listed below.

The resort has been in existence since the 1950's and has had several different owners. The resort itself has had only minor environmental effects since that time. The current owners have corrected many of the substandard facilities at the resort, thus reducing these effects.

### **PROPOSED ACTION ALTERNATIVE**

**ISSUE #1 – The increased sewage from the proposed septic tanks and drain fields will leach into Fremont Lake, affecting water quality and the Town of Pinedale's Water System.**

The following Mitigation Measures and Monitoring Requirements were added to the Proposed Action to address this issue:

#### **Mitigation Measures**

1. Detailed construction plans will be prepared and submitted to the Forest Service for approval on all buildings, roads, parking areas, etc. Construction will not commence until approval is granted.
2. All required permits will be obtained from Sublette County, the State of Wyoming, and the US Army Corps of Engineers. These permits will include Septic Tank/Drain Field permits, Building Permits, Permit to Construct, Storm Water Permit, Section 404 Permit, Underground Injection Control Permit, etc.
3. Copies of all required permits issued by the State of Wyoming, Sublette County, and the US Army Corps of Engineers will be submitted to the Pinedale Ranger District, the Town of Pinedale, and the US Environmental Protection Agency.

#### **Monitoring Requirements**

1. The existing water-quality monitoring plan will be reviewed and updated, if needed, in conjunction with the Town of Pinedale and the EPA to sample and test water quality in Fremont Lake adjacent to the resort. This plan will include water sampling schedule, sample locations, and type of analysis to be conducted. If the samples indicate a lowering of the water quality in the lake or the presence microorganisms, all construction activities at Lakeside Lodge will cease and operations will be

suspended until the location of the pollution source is found and problems are corrected. Copies of the sampling results will be submitted to the Town of Pinedale, The Wyoming Department of Environmental Quality, the Pinedale Ranger District, and the US Environmental Protection Agency.

2. Drinking water testing will be continued as required by the Environmental Protection Agency. Results will be submitted to the Pinedale Ranger District.

The increased amount of sewage, thus, will have no effect on the water quality in Fremont Lake. This conclusion is based on the following:

1. The new (1996) septic system has alarms that shut the system down in case of failure and pumps the sewage to drain fields over 600 feet away from the lake.
2. The remaining old septic system constructed prior to 1996 will be replaced with the currently approved septic systems, which includes alarms and shut-offs and pumping to the drain fields over 600 feet away from the lake.
3. The groundwater flows away from the lake.
4. The bedrock depth is several hundred feet deep, therefore the likelihood that the new septic systems would saturate the soil to bedrock is unlikely.
5. The water sample program conducted by the Town of Pinedale in cooperation with Lakeside Lodge indicates that the water quality in Fremont Lake has not been affected by current development, which includes 11 summer homes with septic systems much closer to the lake, but with far less use overall.
6. The Mitigating Measures and Monitoring Requirements added to this alternative will ensure that the entire septic system is built and operated to current standards. The monitoring program will identify a problem, if it occurs, and the resort operation would be suspended until the source of the problem is identified and corrected.

**ISSUE #2 – The proposed Master Development Plan violates the Watershed Management Control Agreement between the Town of Pinedale, the US Environmental Protection Agency, and the USDA Forest Service, which will result in decreased water quality in Fremont Lake.**

As indicated in Chapter III, there is no violation of the Watershed Management Control Agreement and MOU between the Town of Pinedale, the US Environmental Protection Agency and the US Forest Service.

**ISSUE #3 – The increase in recreation visitors to the resort as a result of the Proposed Action will increase the amount of trash, will increase the number of pets, and will trample out vegetation along the lakeshore, causing increased sedimentation and a lowering of the water quality in Fremont Lake.**

The following Mitigation Measures were added to the Proposed Action to minimize sediment that would enter Fremont Lake, ensure trash is picked up, minimize the effects of pets within the site, and minimize the trampling of vegetation:

1. All exposed soil resulting from construction activities will be re-vegetated. A Re-vegetation Plan will be developed that will include vegetation species to be used (Native Species), timing (Initial re-vegetation to establish ground cover to be implemented in the same season as the construction), mulch if needed, etc.
2. An Erosion Control Plan will be developed. The objective of the plan will be to minimize erosion through construction techniques and to maintain any resulting sediment on site. Techniques to be used will be stockpiling of existing topsoil for re-vegetation purposes, sediment traps, silt fences, water bars, and re-vegetation of exposed soils.
3. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
4. The pets policy will be expanded to include all pets and the leash requirement will be for the entire permit area.
5. All refuse and pet waste will be picked up daily, especially within 200' of the lakeshore.

Assuming all the mitigation is followed, the effects to Fremont Lake will be minimal.

**ISSUE #4 – The proposed Master Development Plan will increase the number of boats, increasing the likelihood of oil and gasoline spills into Fremont Lake.**

The number of boats that would be stored on Fremont Lake would increase from 31 to 80 if the Proposed Action is implemented. As a result, the potential for oil and gasoline spills is greater. However, the existing gasoline dispensing system has been rebuilt to Wyoming Department of Environmental Quality Standards. All spill containment measures are in place. Therefore, the likelihood of gasoline and oil spills is minimal.

**ISSUE #5 – The proposed boat septic holding tank/pump station will increase the likelihood of sewage spills directly into Fremont Lake, degrading water quality.**

The system that would be used has safeguards that minimize the possibility of a sewage spill. Therefore, the effects would be minimal. A holding tank pumping system also reduces the possibility of persons dumping their holding tank directly into the lake.

**ISSUE #6 – The proposed Master Development Plan will destroy valuable cultural resources in that area.**

A cultural resource inventory has been completed for the Lakeside Lodge Resort permit area, and a report, detailing the results of this inventory, has been reviewed by the

Wyoming State Historic Preservation Office. One prehistoric site (48SU972) has been identified as being eligible for the National Register of Historic Places. If the Proposed Action is selected, a data recovery plan would be developed, in consultation with SHPO, resulting in an excavation to recover significant archeological material.

The following Mitigation Measures were added to the Proposed Action to protect Cultural Resources:

1. A portion of the proposed development encroaches on a Cultural Resources site. A data recovery plan will be developed in consultation with the State Historic Preservation Office, resulting in the excavation of significant cultural resources in the permit area.
2. If other cultural Resources are discovered during construction, construction will cease and the resources will be evaluated. Mitigations will be developed in consultation with the State Historic Preservation Office and will be implemented before construction activities resume.

Based on the above mitigations, eligible cultural resources would be protected and adverse effects would be mitigated.

**ISSUE #7 – The proposed Master Development Plan will unacceptably degrade the esthetics on the south shore of Fremont Lake.**

The Proposed action was designed to minimize the effects to esthetics. This includes using rustic materials in building design and using landform and vegetative screening of the development. Since the development proposed is in the foreground viewing distance, as viewed from Fremont Lake or the Fremont Lake Road, it is doubtful that the “Partial Retention” Visual Quality Objective could be met. In the long term, the “Modification” Visual Quality Objective could be met when the vegetation grows to a point to effectively screen much of the development.

The development at the south shore of Fremont Lake includes 11 summer homes, a public boat ramp, a public swim and picnic area, and a yacht club. The area also has five private homes with the potential for 9-10 more. The development proposed at Lakeside Resort thus does not significantly change the esthetics of the south shore of the lake.

The following Mitigation Measures have been added to the Proposed Action to minimize the Visual Resource effects of the development:

1. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.

2. High Plains Marina, LLC will prepare and submit a Landscape Management Plan to the Pinedale Ranger District for approval prior to construction of any new facilities. The plan will include the use of earthen mounds, vegetation, and possibly structures to screen development from view as viewed from Fremont Lake Road and Fremont Lake. The plan will contain the following components:
  - Seeding/planting of areas disturbed during construction including species to be planted and timing.
  - General landscaping including species of plants to be planted and the timing of the landscaping.
  - Protection of existing vegetation during construction.
  - Ongoing maintenance and protection of landscaping during operation.
  - All facilities will be constructed from materials that blend with the natural environment.

**ISSUE #8 – The increase in traffic to and from the resort will create safety problems and increase road maintenance.**

The traffic volumes now are moderate, but are increasing gradually as more recreation use occurs. Traffic now is from a variety of uses, including the public boat ramp, summer homes, CCC Ponds, Sandy Beach, general recreation use, and use of Lakeside Resort. It is difficult to quantify how much traffic is generated from Lakeside Lodge alone, however the use would increase by about 3.5 times that of the current use if the Proposed Action Alternative is selected.

The increase in traffic volume, which occurs mainly in July and August, would increase safety concerns, however the use of the road is moderate to low. Therefore, the increase in safety problems would not be significant.

The same is true for road maintenance costs. The increase in traffic volume during the summer and winter months would increase maintenance costs, but not substantially.

**ISSUE #9 – The increase in recreation visitors will increase noise in the area, affecting the existing summer-home owners and the recreating public.**

The amount of noise will increase if the Proposed Action is implemented. Since most of the recreation visitors using Lakeside Lodge are coming there to relax and enjoy a quiet outdoor setting, the noise probably will not increase to a level that will significantly affect other recreation visitors in the area. If noise does create a problem, the resort will be required, under their Special Use Permit, to implement rules, such as quiet hours, to reduce the noise levels.

**ISSUE #10 – The proposed Master Development Plan may affect habitat or the existence of Threatened or Endangered (T&E) species of wildlife and fish.**

A biological Assessment was prepared analyzing the effects of the proposed development to Threatened and Endangered species of Wildlife, Fish and Plants. Copies of the

Biological Assessment may be reviewed at the Pinedale Ranger District Office. There is no known habitat for species listed on the Threatened or Endangered Species List within the project area or adjacent to it. None of the species have been documented near the project area except bald eagles and grizzly bears. The project area is not within any of the management zones for bald eagles and the closest documented grizzly bear was located approximately 5 miles away. Therefore, the Proposed Action will not affect or will have negligible affect on the following Threatened or Endangered species.

Ute ladies'-tresses  
Black-footed ferret  
Kendall Warm Springs Dace  
Bald eagle  
Canada lynx  
Gray wolf  
Whooping Crane  
Grizzly bear  
Colorado River Endangered fishes

**ISSUE #11 – The proposed Master Development Plan will affect habitat or the existence of Sensitive species of wildlife and fish.**

A biological Evaluation was prepared analyzing the effects to Sensitive species of Wildlife, Fish and Plants. Copies of the Biological Evaluation may be reviewed at the Pinedale Ranger District Office. There is no known habitat for species listed on the Sensitive Species List, except for spotted frogs, within the project area or adjacent to it. The habitat for spotted frogs along the lakeshore will not be disturbed and no “Wetland” areas are being disturbed by the Proposed Action. Therefore, the Proposed Action will not contribute towards the listing of any of the Sensitive species evaluated. The following species were evaluated:

Spotted frog  
Yellow-billed cuckoo  
Boreal owl  
Three-toed woodpecker  
Great gray owl  
Northern Goshawk  
Flammulated owl  
Common Loon  
Trumpeter Swan  
Harlequin Duck  
Peregrine Falcon  
Colorado River cutthroat trout  
Snake River cutthroat  
Fisher and Wolverine  
Western big-eared bat and Spotted bat  
Pygmy rabbit

Greater sage grouse  
Sensitive Plants

**ISSUE #12 – The proposed Master Development Plan will unacceptably affect an important migration route and the winter range of mule deer.**

Mule deer migration occurs from north to south along both sides of Fremont Lake from late October/early November until mid to late December, depending upon snow depths. The deer are on their way to and from the “Mesa’s” south of Pinedale. There are deer in the area of the Lakeside Resort, but most of the movement occurs south of the Fremont Lake Road.

Lakeside Resort does not block the migration route and the migration occurs when the Resort has low activity. Therefore, the Proposed Action will have little effect on mule deer migration.

**ISSUE #13 – The increase in recreation use at Lakeside Lodge will cause increased use of the Sandy Beach Swim Area, causing an increase in trash and negatively affecting or restricting use by local residents and other recreationists.**

The recreation use at Sandy Beach at present is relatively low and is used the heaviest from July through August. The people using Lakeside Resort will likely use the resort facilities before branching out to other areas. Lakeside Resort has areas for people to swim and use beach areas. There will undoubtedly be people staying at the resort that will use Sandy Beach, however it is not predicted that the use will increase trash to unacceptable limits nor will the use cause restrictions to local residents.

## **ALTERNATIVE #1 – NO ACTION**

This alternative displays the effects of the Resort as it exists now. The effects of this alternative therefore are based on the existing facilities and conditions of the resort.

### **ISSUE #1 – The increased sewage from the proposed septic tanks and drain fields will leach into Fremont Lake, affecting water quality and the Town of Pinedale’s Water System.**

The water quality sampling program, described in Chapter III, indicates there are no water quality problems associated with Lakeside Resort. Part of the existing septic system, however, has not been upgraded to include alarms and automatic shut-off capability. These old systems have a higher potential for causing water quality degradation than the proposed systems in any of the action alternatives.

### **ISSUE #2 – The proposed Master Development Plan violates the Watershed Management Control Agreement between the Town of Pinedale, the US Environmental Protection Agency, and the USDA Forest Service, which will result in decreased water quality in Fremont Lake.**

The existing and proposed developments at Lakeside Lodge are not in violation of the Watershed Management Control Agreement. The present owners of the Lodge actively work directly with the EPA, DEQ, USFS, and Town of Pinedale to protect the water quality at Fremont Lake.

### **ISSUE #3 – The increase in recreation visitors to the resort as a result of the Proposed Action will increase the amount of trash, will increase the number of pets, and will trample out vegetation along the lakeshore, causing increased sedimentation and a lowering of the water quality in Fremont Lake.**

The current level of use associated with Lakeside Lodge does not appear to adversely affect the water quality of Fremont Lake and there is not a documented problem with trash or pets at the resort.

### **ISSUE #4 – The proposed Master Development Plan will increase the number of boats, increasing the likelihood of oil and gasoline spills into Fremont Lake.**

There are no known or documented cases of oil and gasoline spills occurring in Fremont Lake as a result of the current refueling operations. The existing fuel tank has been reconstructed by the current resort owners to meet DEQ requirements. Some evidence of minor fuel dripping has been observed from the gasoline pump located immediately adjacent to the shoreline.

### **ISSUE #5 – The proposed boat septic holding tank/pump station will increase the likelihood of sewage spills directly into Fremont Lake, degrading water quality.**

There is no septic holding tank/pump station facility for boats on Fremont Lake to date. This may lead to individuals discharging their septic systems in the lake, although no documented cases have occurred to date.

**ISSUE #6 – The proposed Master Development Plan will destroy valuable cultural resources in that area.**

The potential for disturbance of cultural resources within the permit boundary is minimal with this alternative as no construction or other disruptive activities would be allowed with this no-action alternative.

**ISSUE #7 – The proposed Master Development Plan will unacceptably degrade the esthetics on the south shore of Fremont Lake.**

Currently, the Lodge structures blend fairly well with the environment. The main area of visual concern for this alternative is the boat/trailer holding area, which lacks sufficient vegetative screening and is not visually appealing as viewed from Fremont Lake Road.

**ISSUE #8 – The increase in traffic to and from the resort will create safety problems and increase road maintenance.**

Under this no-action alternative, there are no identified safety concerns and minimal maintenance concerns associated with current Resort use levels as compared to other uses of the road.

**ISSUE #9 – The increase in recreation visitors will increase noise in the area, affecting the existing summer-home owners and the recreating public.**

Under the current resort management, there are no documented problems between resort users and the existing summer-home owners and other recreating publics.

**ISSUE #10 – The proposed Master Development Plan may affect habitat or the existence of Threatened or Endangered species of wildlife and fish.**

**ISSUE #11 – The proposed Master Development Plan will affect habitat or the existence of Sensitive species of wildlife and fish.**

**ISSUE #12 – The proposed Master Development Plan will unacceptably affect an important migration route and the winter range of mule deer.**

**ISSUE #13 – The increase in recreation use at Lakeside Lodge will cause increased use of the Sandy Beach Swim Area, causing an increase in trash and negatively affecting or restricting use by local residents and other recreationists.**

There are no unacceptable environmental effects from Lakeside Resort, therefore this alternative has no adverse effects for issues 2-13.

## **ALTERNATIVE #2**

**ISSUE #1 – The increased sewage from the proposed septic tanks and drain fields will leach into Fremont Lake, affecting water quality and the Town of Pinedale’s Water System.**

The following Mitigation Measures and Monitoring Requirements were added to Alternative #2 to address this issue:

### **Mitigation Measures**

1. Detailed construction plans will be prepared and submitted to the Forest Service for approval on all buildings, roads, parking areas, etc. Construction will not commence until approval is granted.
2. All required permits will be obtained from Sublette County, the State of Wyoming, and the US Army Corps of Engineers. These permits will include Septic Tank/Drain Field permits, Building Permits, Permit to Construct, Storm Water Permit, Section 404 Permit, Underground Injection Control Permit, etc.
3. Copies of all required permits issued by the State of Wyoming, Sublette County, and the US Army Corps of Engineers will be submitted to the Pinedale Ranger District, the Town of Pinedale, and the US Environmental Protection Agency.

### **Monitoring Requirements**

1. A water-quality monitoring plan will be developed in conjunction with the Town of Pinedale to sample and test water quality in Fremont Lake adjacent to the resort. This plan will include waster sampling schedule, sample locations, and type of analysis to be conducted. If the samples indicate a lowering of the water quality in the lake or the presence microorganisms all construction activities at Lakeside will cease and operations will be suspended until the location of the pollution source is found and problems are corrected. Copies of the sampling results will be submitted to the Town of Pinedale, The Wyoming Department of Environmental Quality, the Pinedale Ranger District, and the US Environmental Protection Agency.
2. All drinking water testing will be completed as required by the Environmental Protection Agency. Results will be submitted to the Pinedale Ranger District.

The increased amount of sewage, thus, will have no effect on the water quality in Fremont Lake. This conclusion is based on the following:

1. The new (1996) septic system has alarms that shut the system down in case of failure and pumps the sewage to drain fields over 600 feet away from the lake.

2. The remaining old septic system constructed prior to 1996 will be replaced with the currently approved septic systems, which includes alarms and shut-offs and pumping to the drain fields over 600 feet away from the lake.
3. The groundwater flows away from the lake.
4. The bedrock depth is several hundred feet deep, therefore the likelihood that the new septic systems would saturate the soil to bedrock is unlikely.
5. The water sample program conducted by the Town of Pinedale in cooperation with Lakeside Lodge indicates that the water quality in Fremont Lake has not been affected by current development, which includes 11 summer homes with septic systems much closer to the lake, but with far less use overall.
6. The Mitigating Measures and Monitoring Requirements added to this alternative will ensure that the entire septic system is built and operated to current standards. The monitoring program will identify a problem, if it occurs, and the resort operation would be suspended until the source of the problem is identified and corrected.

**ISSUE #2 – The proposed Master Development Plan violates the Watershed Management Control Agreement between the Town of Pinedale, the US Environmental Protection Agency, and the USDA Forest Service, which will result in decreased water quality in Fremont Lake.**

As indicated in Chapter III, there is no violation of the Watershed Management Agreement and MOU between the Town of Pinedale, the US Environmental Protection Agency and the USDA Forest Service.

**ISSUE #3 – The increase in recreation visitors to the resort as a result of the Proposed Action will increase the amount of trash, will increase the number of pets, and will trample out vegetation along the lakeshore, causing increased sedimentation and a lowering of the water quality in Fremont Lake.**

The following Mitigation Measures were added to Alternative #2 to minimize sediment that would enter Fremont Lake, ensure trash is picked up, minimize the effects of pets within the site, and minimize the trampling of vegetation:

1. All exposed soil resulting from construction activities will be re-vegetated. A re-vegetation Plan will be developed that will include vegetation species to be used (Native Species), timing (Initial re-vegetation to establish ground cover to be implemented in the same season as the construction), mulch if needed, etc.
2. An Erosion Control Plan will be developed. The objective of the plan will be to minimize erosion through construction techniques and to maintain any resulting sediment on site. Techniques to be used will be stockpiling of existing topsoil for re-vegetation purposes, sediment traps, silt fences, water bars, and quick re-vegetation of exposed soils.

3. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans.
4. The pets' policy will be expanded to include all pets and the leash requirement will be for the entire permit area.
5. All refuse and pet waste will be picked up daily, especially within 200' of the lakeshore.

Assuming all the mitigation is followed, the effects to Fremont Lake will be minimal.

**ISSUE #4 – The proposed Master Development Plan will increase the number of boats, increasing the likelihood of oil and gasoline spills into Fremont Lake.**

The number of boats that would be stored on Fremont Lake would increase from 31 to 80 if this alternative is implemented. As a result, the potential for oil and gasoline spills is greater. However, the gasoline dispensing system has been rebuilt to Wyoming Department of Environmental Quality Standards. All spill containment measures are in place. Therefore, the likelihood of gasoline and oil spills is minimal.

**ISSUE #5 – The proposed boat septic holding tank/pump station will increase the likelihood of sewage spills directly into Fremont Lake, degrading water quality.**

The system that would be used has safeguards that minimize the possibility of a sewage spill. Therefore, the effects would be minimal. A holding tank pumping system also reduces the possibility of persons dumping their holding tank directly into the lake.

**ISSUE #6 – The proposed Master Development Plan will destroy valuable cultural resources in that area.**

A cultural resource inventory has been completed for the Lakeside Lodge Resort permit area and a report detailing the results of this inventory has been reviewed by the Wyoming State Historic Preservation Office. One prehistoric site (48SU972) has been identified as being eligible for the National Register of Historic Places. If this alternative is selected, this site will be avoided, although some ground disturbance would occur adjacent to the site.

The following Mitigation Measure was added to protect Cultural Resources:

1. Significant cultural resources will be avoided. Construction activities will be monitored and if other cultural Resources are discovered during construction, construction will cease and the resources will be evaluated. Mitigation Measures will be developed in consultation with the State Historic Preservation Office and will be implemented before construction activities resume.

Based on the above, cultural resources would be protected and there will be no effect to cultural resources.

**ISSUE #7 – The proposed Master Development Plan will unacceptably degrade the esthetics on the south shore of Fremont Lake.**

Alternative #2 was designed to minimize the effects to esthetics. This includes using rustic materials in building design and using landform and vegetation to screen much of the development from view. Since the development proposed is in the foreground viewing distance as viewed from Fremont Lake or the Fremont Lake Road, it is doubtful that the “Partial Retention” Visual Quality Objective could be met. In the long term, the “Modification” Visual Quality Objective could be met when the vegetation grows to a point to effectively screen much of the development.

The development at the south shore of Fremont Lake includes 11 summer homes, a public boat ramp, a public swim and picnic area, and a yacht club. The area also has five private homes with the potential for 9-10 more. The development proposed at Lakeside Resort thus does not significantly change the esthetics of the south shore of the lake.

The following Mitigation Measures have been added to this Alternative to minimize the Visual Resource effects of the development:

1. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
2. High Plains Marina, LLC will prepare and submit a Landscape Management Plan to the Forest Service for approval prior to construction of any new facilities. The plan will include the use of earthen mounds, vegetation, and possibly structures to screen development from view as viewed from Fremont Lake Road and Fremont Lake. The plan will contain the following components:
  - Seeding/planting of areas disturbed during construction including species to be planted and timing.
  - General landscaping including species of plants to be planted and the timing of the landscaping.
  - Protection of existing vegetation during construction.
  - Ongoing maintenance and protection of landscaping during operation.
  - All facilities will be constructed from materials that blend with the natural environment.

This alternative lowers the overall capacity of the resort by approximately 32% from the Proposed Action Alternative. All of the proposed cabins near the top of the ridge were eliminated, and the number of campground sites were reduced by eight. Also, the campground units along Fremont Lake Road were designed with gaps between groups of units to allow for more vegetative screening along the road. The boat storage parking and

maintenance building were moved from the area adjacent to the road to be located at the base of the ridge. This increases the viewing distance and allows for more effective vegetative screening. This alternative has significantly reduced the visual impacts of the Proposed Action development as viewed both from the lake and Fremont Lake Road.

**ISSUE #8 – The increase in traffic to and from the resort will create safety problems and increase road maintenance.**

The traffic volumes now are relatively low, but are increasing gradually as more recreation use occurs. Traffic now is from a variety of uses, including the public boat ramp, summer homes, CCC Ponds, Sandy Beach, general recreation use, and use of Lakeside Resort. It is difficult to quantify how much traffic is generated from Lakeside Lodge alone, however the use would increase by about 2.5 times that of the current use if Alternative #2 is selected.

The increase in traffic volume, which occurs mainly in July and August, would increase safety concerns, however the use of the road is moderate to low. Therefore, the increase in safety problems would not be significant.

The same is true for road maintenance costs. The increase in traffic volume would increase maintenance costs, but not substantially.

This alternative decreases the overall capacity of the resort from the Proposed Action by approximately 32%, thus would also reduce the traffic levels by that amount. This alternative then would have a significant reduction in safety problems and maintenance costs from the Proposed Action.

**ISSUE #9 – The increase in recreation visitors will increase noise in the area, affecting the existing summer-home owners and the recreating public.**

The amount of noise will increase from the existing condition if Alternative #2 is implemented. Since most of the recreation visitors using Lakeside Lodge are coming there to relax and enjoy a quiet outdoor setting, the noise probably will not increase to a level that will significantly affect other recreation visitors in the area. If noise does create a problem, the resort will be required to implement rules, such as quiet hours, to reduce the noise levels. With an approximate 32% reduction in overall capacity, the noise generated from the resort with this alternative will be less than the Proposed Action.

**ISSUE #10 – The proposed Master Development Plan may affect habitat or the existence of Threatened or Endangered species of wildlife and fish.**

The effects to Threatened or Endangered species from Alternative #2 would be less than the Proposed Action, which concluded either little or no adverse effect listed species.

**ISSUE #11 – The proposed Master Development Plan will affect habitat or the existence of Sensitive species of wildlife and fish.**

The effects to Sensitive species from Alternative #2 would be less than the Proposed Action, which concluded little or no adverse effects to sensitive species.

**ISSUE #12 – The proposed Master Development Plan will unacceptably affect an important migration route and the winter range of mule deer.**

The effects to mule deer migration from Alternative #2 would be less than the Proposed Action, which concluded only minor effects to the mule deer migration.

**ISSUE #13 – The increase in recreation use at Lakeside Lodge will cause increased use of the Sandy Beach Swim Area, causing an increase in trash and negatively affecting or restricting use by local residents and other recreationists.**

With an approximate 32% reduction in overall capacity from the Proposed Action, this alternative would have less effect to Sandy Beach. The conclusion is there would be no significant effects to the site itself and the users of the site.

### **ALTERNATIVE #3**

#### **ISSUE #1 – The increased sewage from the proposed septic tanks and drain fields will leach into Fremont Lake, affecting water quality and the Town of Pinedale’s Water System.**

The following Mitigation Measures and Monitoring Requirements were added to the Proposed Action to address this issue:

#### **Mitigation Measures**

1. Detailed construction plans will be prepared and submitted to the Forest Service for approval on all buildings, roads, parking areas, etc. Construction will not commence until approval is granted.
2. All required permits will be obtained from Sublette County, the State of Wyoming, and the US Army Corps of Engineers. These permits will include Septic Tank/Drain Field permits, Building Permits, Permit to Construct, Storm Water Permit, Section 404 Permit, Underground Injection Control Permit, etc.
3. Copies of all required permits issued by the State of Wyoming, Sublette County, and the US Army Corps of Engineers will be submitted to the Pinedale Ranger District, the Town of Pinedale, and the US Environmental Protection Agency.

#### **Monitoring Requirements**

1. The existing water-quality monitoring plan will be reviewed and updated, if needed, in conjunction with the Town of Pinedale and the EPA to sample and test water quality in Fremont Lake adjacent to the resort. This plan will include water sampling schedule, sample locations, and type of analysis to be conducted. If the samples indicate a lowering of the water quality in the lake or the presence microorganisms, all construction activities at Lakeside Lodge will cease and operations will be suspended until the location of the pollution source is found and problems are corrected. Copies of the sampling results will be submitted to the Town of Pinedale, The Wyoming Department of Environmental Quality, the Pinedale Ranger District, and the US Environmental Protection Agency.
2. Drinking water testing will be continued as required by the Environmental Protection Agency. Results will be submitted to the Pinedale Ranger District.

The increased amount of sewage, thus, will have no effect on the water quality in Fremont Lake. This conclusion is based on the following:

1. The new (1996) septic system has alarms that shut the system down in case of failure and pumps the sewage to drain fields over 600 feet away from the lake.

2. The remaining old septic system constructed prior to 1996 will be replaced with the currently approved septic systems, which includes alarms and shut-offs and pumping to the drain fields over 600 feet away from the lake.
3. The groundwater flows away from the lake.
4. The bedrock depth is several hundred feet deep, therefore the likelihood that the new septic systems would saturate the soil to bedrock is unlikely.
5. The water sample program conducted by the Town of Pinedale in cooperation with Lakeside Lodge indicates that the water quality in Fremont Lake has not been affected by current development, which includes 11 summer homes with septic systems much closer to the lake, but with far less use overall.
6. The Mitigating Measures and Monitoring Requirements added to this alternative will ensure that the entire septic system is built and operated to current standards. The monitoring program will identify a problem, if it occurs, and the resort operation would be suspended until the source of the problem is identified and corrected.

**ISSUE #2 – The proposed Master Development Plan violates the Watershed Management Control Agreement between the Town of Pinedale, the US Environmental Protection Agency, and the USDA Forest Service, which will result in decreased water quality in Fremont Lake.**

As indicated in Chapter III, there is no violation of the Watershed Management Agreement and MOU between the Town of Pinedale, the US Environmental Protection Agency and the USDA Forest Service.

**ISSUE #3 – The increase in recreation visitors to the resort as a result of the Proposed Action will increase the amount of trash, will increase the number of pets, and will trample out vegetation along the lakeshore, causing increased sedimentation and a lowering of the water quality in Fremont Lake.**

The following Mitigation Measures were added to the Alternative #3 to minimize sediment that would enter Fremont Lake, ensure trash is picked up, minimize the effects of pets within the site, and minimize the trampling of vegetation:

1. All exposed soil resulting from construction activities will be re-vegetated. A Re-vegetation Plan will be developed that will include vegetation species to be used (Native Species), timing (Initial re-vegetation to establish ground cover to be implemented in the same season as the construction), mulch if needed, etc.
2. An Erosion Control Plan will be developed. The objective of the plan will be to minimize erosion through construction techniques and to maintain any resulting sediment on site. Techniques to be used will be stockpiling of existing topsoil for re-vegetation purposes, sediment traps, silt fences, water bars, and re-vegetation of exposed soils.

3. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
4. The pets policy will be expanded to include all pets and the leash requirement will be for the entire permit area.
5. All refuse and pet waste will be picked up daily, especially within 200' of the lakeshore.

Assuming all the mitigation is followed, the effects to Fremont Lake will be minimal.

**ISSUE #4 – The proposed Master Development Plan will increase the number of boats, increasing the likelihood of oil and gasoline spills into Fremont Lake.**

The number of boats that would be stored on Fremont Lake would increase from 31 to 80 if this Alternative is implemented. As a result, the potential for oil and gasoline spills is greater. However, the gasoline dispensing system has been rebuilt to Wyoming Department of Environmental Quality Standards. All spill containment measures are in place. Therefore, the likelihood of gasoline and oil spills is minimal.

**ISSUE #5 – The proposed boat septic holding tank/pump station will increase the likelihood of sewage spills directly into Fremont Lake, degrading water quality.**

The system that would be used has safeguards that minimize the possibility of a sewage spill. Therefore, the effects would be minimal. A holding tank pumping system also reduces the possibility of persons dumping their holding tank directly into the lake.

**ISSUE #6 – The proposed Master Development Plan will destroy valuable cultural resources in that area.**

A cultural resource inventory has been completed for the Lakeside Lodge Resort permit area. A report detailing the results of this inventory has been reviewed by the Wyoming State Historic Preservation Office. One prehistoric site (48SU972) has been identified as being eligible for the National Register of Historic Places. If this alternative is selected, this site will be avoided.

The following Mitigation Measure was added to protect Cultural Resources:

1. Significant cultural resources will be avoided. Construction activities will be monitored, especially in the proposed campground area, and if other cultural resources are discovered during construction, construction will cease and the resources will be evaluated. Mitigation Measures will be developed in consultation with the State Historic Preservation Office and will be implemented before construction activities resume.

Based on the above, cultural resources would be protected and there will be no effect to cultural resources.

**ISSUE #7 – The proposed Master Development Plan will unacceptably degrade the esthetics on the south shore of Fremont Lake.**

Alternative #3 was designed to minimize the effects to esthetics. This includes using rustic materials in building design and using landform and vegetation to screen much of the development from view. Since the development proposed is in the foreground viewing distance as viewed from Fremont Lake or the Fremont Lake Road, it is doubtful that the “Partial Retention” Visual Quality Objective could be met. In the long term, the “Modification” Visual Quality Objective will be met when the vegetation grows to a point to effectively screen much of the development. With the reduction in campground sites from the Proposed Action, the effects to the visual resource from Alternative #3 will be significantly less than with the Proposed Action, Alternative #2, and Alternative #4.

The development at the south shore of Fremont Lake includes 11 summer homes, a public boat ramp, a public swim and picnic area, and a yacht club. The area also has five private homes with the potential for 9-10 more. The development proposed at Lakeside Resort thus does not significantly change the esthetics of the south shore of the lake.

The following Mitigation Measures have been added to this Alternative to minimize the Visual Resource effects of the development:

1. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
  
2. High Plains Marina, LLC will prepare and submit a Landscape Management Plan to the Forest Service for approval prior to construction of any new facilities. The plan will include the use of earthen mounds, vegetation, and possibly structures to screen development from view as viewed from Fremont Lake Road and Fremont Lake. The plan will contain the following components:
  - Seeding/planting of areas disturbed during construction including species to be planted and timing.
  - General landscaping including species of plants to be planted and the timing of the landscaping.
  - Protection of existing vegetation during construction.
  - Ongoing maintenance and protection of landscaping during operation.
  - All facilities will be constructed from materials that blend with the natural environment.

This alternative lowers the overall capacity of the resort by approximately 47% from the Proposed Action Alternative. All of the proposed cabins near the top of the ridge were eliminated, and no new campground sites would be added to the existing condition. This alternative has significantly reduced the visual effects of the Proposed Action development as viewed both from Fremont Lake Road and the lake.

**ISSUE #8 – The increase in traffic to and from the resort will create safety problems and increase road maintenance.**

The traffic volumes now are moderate, but are increasing gradually as more recreation use occurs. Traffic now is from a variety of uses including the public boat ramp, summer homes, CCC Ponds, Sandy Beach, general recreation use, and use of Lakeside Resort. It is difficult to quantify how much traffic is generated from Lakeside Lodge alone, however the use would increase by about 2 times that of the current use if Alternative #3 is selected.

The increase in traffic volume, which occurs mainly in July and August, would increase safety concerns, however the use of the road is moderate to low. Therefore, the increase in safety problems would not be significant.

The same is true for road maintenance costs. The increase in traffic volume would increase maintenance costs, but not substantially.

This alternative decreases the overall capacity of the resort from the Proposed Action by approximately 47%, thus would also reduce the traffic levels by that amount. This alternative then would have a significant reduction in safety problems and maintenance costs.

**ISSUE #9 – The increase in recreation visitors will increase noise in the area, affecting the existing summer-home owners and the recreating public.**

The amount of noise will increase if Alternative #3 is implemented. Since most of the recreation visitors using Lakeside Lodge are coming there to relax and enjoy a quiet outdoor setting, the noise probably will not increase to a level that will significantly affect other recreation visitors in the area. If noise does create a problem, the resort will be required to implement rules, such as quiet hours, to reduce the noise levels. With an approximate 47% reduction in overall capacity from the Proposed Action, the noise generated from the resort will be less than the Proposed Action, Alternative #2 and Alternative #4.

**ISSUE #10 – The proposed Master Development Plan may affect habitat or the existence of Threatened or Endangered species of wildlife and fish.**

The effects to Threatened or Endangered species from Alternative #3 would be less than the Proposed Action, which concluded either little or no adverse effect listed species.

**ISSUE #11 – The proposed Master Development Plan will affect habitat or the existence of Sensitive species of wildlife and fish.**

The effects to Sensitive species from Alternative #3 would be less than the Proposed Action, which concluded little or no adverse effects to sensitive species.

**ISSUE #12 – The proposed Master Development Plan will unacceptably affect an important migration route and the winter range of mule deer.**

The effects to mule deer migration from Alternative #3 would be less than the Proposed Action, which concluded only minor effects to the mule deer migration.

**ISSUE #13 – The increase in recreation use at Lakeside Lodge will cause increased use of the Sandy Beach Swim Area, causing an increase in trash and negatively affecting or restricting use by local residents and other recreationists.**

With an approximate 47% reduction in overall capacity from the Proposed Action, this alternative would have less effect to Sandy Beach. The conclusion is there would be no significant effects to the site itself and the users of the site.

## **ALTERNATIVE #4**

### **ISSUE #1 – The increased sewage from the proposed septic tanks and drain fields will leach into Fremont Lake, affecting water quality and the Town of Pinedale’s Water System.**

The following Mitigation Measures and Monitoring Requirements were added to the Proposed Action to address this issue:

#### **Mitigation Measures**

1. Detailed construction plans will be prepared and submitted to the Forest Service for approval on all buildings, roads, parking areas, etc. Construction will not commence until approval is granted.
2. All required permits will be obtained from Sublette County, the State of Wyoming, and the US Army Corps of Engineers. These permits will include Septic Tank/Drain Field permits, Building Permits, Permit to Construct, Storm Water Permit, Section 404 Permit, Underground Injection Control Permit, etc.
3. Copies of all required permits issued by the State of Wyoming, Sublette County, and the US Army Corps of Engineers will be submitted to the Pinedale Ranger District, the Town of Pinedale, and the US Environmental Protection Agency.

#### **Monitoring Requirements**

1. The existing water-quality monitoring plan will be reviewed and updated, if needed, in conjunction with the Town of Pinedale and the EPA to sample and test water quality in Fremont Lake adjacent to the resort. This plan will include water sampling schedule, sample locations, and type of analysis to be conducted. If the samples indicate a lowering of the water quality in the lake or the presence microorganisms, all construction activities at Lakeside Lodge will cease and operations will be suspended until the location of the pollution source is found and problems are corrected. Copies of the sampling results will be submitted to the Town of Pinedale, The Wyoming Department of Environmental Quality, the Pinedale Ranger District, and the US Environmental Protection Agency.
2. Drinking water testing will be continued as required by the Environmental Protection Agency. Results will be submitted to the Pinedale Ranger District.

The increased amount of sewage, thus, will have no effect on the water quality in Fremont Lake. This conclusion is based on the following:

1. The new (1996) septic system has alarms that shut the system down in case of failure and pumps the sewage to drain fields over 600 feet away from the lake.

2. The remaining old septic system constructed prior to 1996 will be replaced with the currently approved septic systems, which includes alarms and shut-offs and pumping to the drain fields over 600 feet away from the lake.
3. The groundwater flows away from the lake.
4. The bedrock depth is several hundred feet deep, therefore the likelihood that the new septic systems would saturate the soil to bedrock is unlikely.
5. The water sample program conducted by the Town of Pinedale in cooperation with Lakeside Lodge indicates that the water quality in Fremont Lake has not been affected by current development, which includes 11 summer homes with septic systems much closer to the lake, but with far less use overall.
6. The Mitigating Measures and Monitoring Requirements added to this alternative will ensure that the entire septic system is built and operated to current standards. The monitoring program will identify a problem, if it occurs, and the resort operation would be suspended until the source of the problem is identified and corrected.

**ISSUE #2 – The proposed Master Development Plan violates the Watershed Management Control Agreement between the Town of Pinedale, the US Environmental Protection Agency, and the USDA Forest Service, which will result in decreased water quality in Fremont Lake.**

As indicated in Chapter III, there is no violation of the Watershed Management Agreement and MOU between the Town of Pinedale, the US Environmental Protection Agency and the USDA Forest Service.

**ISSUE #3 – The increase in recreation visitors to the resort as a result of the Proposed Action will increase the amount of trash, will increase the number of pets, and will trample out vegetation along the lakeshore, causing increased sedimentation and a lowering of the water quality in Fremont Lake.**

The following Mitigation Measures were added to Alternative #4 to minimize sediment that would enter Fremont Lake, ensure trash is picked up, minimize the effects of pets within the site, and minimize the trampling of vegetation:

1. All exposed soil resulting from construction activities will be re-vegetated. A Re-vegetation Plan will be developed that will include vegetation species to be used (Native Species), timing (Initial re-vegetation to establish ground cover to be implemented in the same season as the construction), mulch if needed, etc.
2. An Erosion Control Plan will be developed. The objective of the plan will be to minimize erosion through construction techniques and to maintain any resulting sediment on site. Techniques to be used will be stockpiling of existing topsoil for re-vegetation purposes, sediment traps, silt fences, water bars, and re-vegetation of exposed soils.

3. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
4. The pets policy will be expanded to include all pets and the leash requirement will be for the entire permit area.
5. All refuse and pet waste will be picked up daily, especially within 200' of the lakeshore.

Assuming all the mitigation is followed, the effects to Fremont Lake will be minimal.

**ISSUE #4 – The proposed Master Development Plan will increase the number of boats, increasing the likelihood of oil and gasoline spills into Fremont Lake.**

The number of boats that would be stored on Fremont Lake would increase from 31 to 80 if this Alternative is implemented. As a result, the potential for oil and gasoline spills is greater. However, the gasoline dispensing system has been rebuilt to Wyoming Department of Environmental Quality Standards. All spill containment measures are in place. Therefore, the likelihood of gasoline and oil spills is minimal.

**ISSUE #5 – The proposed boat septic holding tank/pump station will increase the likelihood of sewage spills directly into Fremont Lake, degrading water quality.**

The system that would be used has safeguards that minimize the possibility of a sewage spill. Therefore, the effects would be minimal. A holding tank pumping system also reduces the possibility of persons dumping their holding tank directly into the lake.

**ISSUE #6 – The proposed Master Development Plan will destroy valuable cultural resources in that area.**

A cultural resource inventory has been completed for the Lakeside Lodge Resort permit area and a report detailing the results of this inventory has been reviewed by the Wyoming State Historic Preservation Office. One prehistoric site (48SU972) has been identified as being eligible for the National Register of Historic Places. If this alternative is selected, this site will be avoided.

The following Mitigation Measure was added to protect Cultural Resources:

1. Significant cultural resources will be avoided. Construction activities will be monitored and if other cultural Resources are discovered during construction, construction will cease and the resources will be evaluated. Mitigation measures will be developed in consultation with the State Historic Preservation Office and will be implemented before construction activities resume.

Based on the above, cultural resources would be protected and there will be no effect to cultural resources.

**ISSUE #7 – The proposed Master Development Plan will unacceptably degrade the esthetics on the south shore of Fremont Lake.**

Alternative #4 was designed to minimize the effects to esthetics. This includes using rustic materials in building design and using landform and vegetation to screen much of the development from view. Since the development proposed is in the foreground viewing distance as viewed from Fremont Lake or the Fremont Lake Road, it is doubtful that the “Partial Retention” Visual Quality Objective could be met. In the long term, the “Modification” Visual Quality objective could be met when the vegetation grows to a point to effectively screen much of the development.

The development at the south shore of Fremont Lake includes 11 summer homes, a public boat ramp, a public swim and picnic area, and a yacht club. The area also has five private homes with the potential for 9-10 more. The development proposed at Lakeside Resort thus does not significantly change the esthetics of the south shore of the lake.

The following Mitigation Measures have been added to this Alternative to minimize the Visual Resource effects of the development:

1. Existing vegetation along the lakeshore will be protected. If vegetation is disturbed or lost, the area will be promptly re-vegetated according to the landscape and erosion control plans. As a general rule, vegetation that is screening development from view will be replaced in kind.
2. High Plains Marina, LLC will prepare and submit a Landscape Management Plan to the Forest Service for approval prior to construction of any new facilities. The plan will include the use of earthen mounds, vegetation, and possibly structures to screen development from view as viewed from Fremont Lake Road and Fremont Lake. The plan will contain the following components:
  - Seeding/planting of areas disturbed during construction including species to be planted and timing.
  - General landscaping including species of plants to be planted and the timing of the landscaping.
  - Protection of existing vegetation during construction.
  - Ongoing maintenance and protection of landscaping during operation.
  - All facilities will be constructed from materials that blend with the natural environment.

This alternative lowers the overall capacity of the resort by approximately 37% from the Proposed Action Alternative. All of the proposed cabins near the top of the ridge were eliminated, and campground sites were reduced from the Proposed Action by twenty-one units. Also, the campground units along Fremont Lake Road were designed with gaps between groups of units to allow for more vegetative screening along the road. This

alternative has significantly reduced the visual impacts of the Proposed Action development as viewed both from the lake and Fremont Lake Road.

**ISSUE #8 – The increase in traffic to and from the resort will create safety problems and increase road maintenance.**

The traffic volumes now are relatively moderate, but are increasing gradually as more recreation use occurs. Traffic now is from a variety of uses including the public boat ramp, summer homes, CCC Ponds, Sandy Beach, general recreation use, and use of Lakeside Resort. It is difficult to quantify how much traffic is generated from Lakeside Lodge alone, however the use would increase by about 2.5 times that of the current use if Alternative #4 is selected.

The increase in traffic volume, which occurs mainly in July and August, would increase safety concerns, however the use of the road is moderate to low. Therefore, the increase in safety problems would not be significant.

The same is true for road maintenance costs. The increase in traffic volume would increase maintenance costs, but not substantially.

This alternative decreases the overall capacity from the Proposed Action by approximately 37%, thus would also reduce the traffic levels by that amount. This alternative then would have a significant reduction in safety problems and maintenance costs.

**ISSUE #9 – The increase in recreation visitors will increase noise in the area, affecting the existing summer-home owners and the recreating public.**

The amount of noise will increase if Alternative #4 is implemented. Since most of the recreation visitors using Lakeside Lodge are coming there to relax and enjoy a quiet outdoor setting, the noise probably will not increase to a level that will significantly affect other recreation visitors in the area. If noise does create a problem, the resort will be required to implement rules, such as quiet hours, to reduce the noise levels. With an approximate 37% reduction in overall capacity, the noise generated from the resort will be less than the Proposed Action.

**ISSUE #10 – The proposed Master Development Plan may affect habitat or the existence of Threatened or Endangered species of wildlife and fish.**

The effects to Threatened or Endangered species from Alternative #4 would be less than the Proposed Action, which concluded either little or no adverse effect listed species.

**ISSUE #11 – The proposed Master Development Plan will affect habitat or the existence of Sensitive species of wildlife and fish.**

The effects to Sensitive species from Alternative #4 would be less than the Proposed Action, which concluded little or no adverse effects to sensitive species.

**ISSUE #12 – The proposed Master Development Plan will unacceptably affect an important migration route and the winter range of mule deer.**

The effects to mule deer migration from Alternative #4 would be less than the Proposed Action, which concluded only minor effects to the mule deer migration.

**ISSUE #13 – The increase in recreation use at Lakeside Lodge will cause increased use of the Sandy Beach Swim Area, causing an increase in trash and negatively affecting or restricting use by local residents and other recreationists.**

With an approximate 37% reduction in overall capacity from the Proposed Action, this alternative would have less effect to Sandy Beach. The conclusion is there would be no significant effects to the site itself and the users of the site.

## **CUMULATIVE EFFECTS**

Cumulative effects are defined in the implementing regulations of the National Environmental Policy Act 40 CFR 1508.7 and the definition is as follows:

“Cumulative impact” is the impact on the environment, which results in the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Activities that could contribute to cumulative effects in the watershed are domestic livestock grazing, recreational development, private land development, increases in recreation use of the area, fires, both wildland and prescribed fires, and natural disturbances such as landslides.

**Domestic livestock grazing** – The only domestic livestock grazing in the watershed is from two pastures in the Soda Lake grazing allotment. These pastures are located on the west side of Fremont Lake from the National Forest Boundary at the Elk Fence to approximately Chambers Bay. These pastures are managed as deferred rotation pastures, where livestock can graze the pastures every season but at different times of the season to maintain healthy vegetation. The authorization is for 125 head of cattle for approximately two months. These pastures have not been grazed for five years due to grazing permittee and Forest service preference for non-use. This use has been authorized for over 30 years and will continue into the future.

There are minor amounts of sedimentation to Fremont Lake as a result of this use, and the potential for increases in fecal coliform and cryptosporidium entering the lake and reducing water quality. At present the sedimentation is not significant and, based on the water quality monitoring conducted by the Town of Pinedale since 1996, there have been no effects to the water quality in Fremont Lake from domestic livestock grazing in this allotment.

**Prescribed and Wildland fires** – There was a wildland fire on the east side of Fremont Lake in 1988 that burned approximately 1300 acres, and one prescribed fire on the west side of Fremont Lake approximately 500-600 acres conducted in 1999. Both fires contributed minor sedimentation and organic material into Fremont Lake for a short time after the fires (1-2 years) until vegetation was re-established on the burned area. Neither fire has had any long-term significant effects to the water quality in the lake, esthetics of the area, or Mule deer/Elk transitional range. There are no prescribed fires planned for the reasonably foreseeable future within the watershed.

**Natural disturbances** – There is an active natural landslide on the east side of Fremont Lake above Sylvan Bay. This landslide periodically contributes minor amounts of sediment and organic matter into the lake. Due to the lake’s size and volume of water, there have been no significant changes to the water quality in the lake.

**Recreation and private land development** – There are 11 summer homes, a Yacht Club, a swim and picnic area, a boat ramp with parking area, a water chlorination building, the CCC Ponds recreation site, and 6 private homes located on the south shore of Fremont Lake in addition to Lakeside Lodge. There are 42 summer homes, a 54-unit Forest Service campground, and a boat ramp on the east side of the lake approximately half way up the lake. There is the potential for approximately 10 more private homes to be developed in the area. A paved bicycle path extends from the Town of Pinedale to the CCC Pond recreation site. There are no other planned recreational developments in the watershed other than the proposed expansion of Lakeside Lodge Resort. Much of the existing development has been in place for several decades with minor environmental effects. The biggest effect has been to the esthetics along the south shore of Fremont Lake. Many of the developments are partially or totally visible from either the lake or the roads along the south and east sides of the lake, and detract from a natural appearing setting.

**Increases in recreation use** – Recreation use of Fremont Lake and facilities adjacent to the lake has increased in the last 20 years, particularly during the winter months. One organized fishing derby occurs during the winter on the lake and permits for other organized events are likely to be requested at this scenic site. The overall increase in use increases the potential for undesirable environmental effects. However, the use of the lake is relatively low compared to other lakes of its size and natural beauty. There is no evidence that this increase in use has had any measurable effects to water quality, vegetation loss, erosion, wildlife populations or habitat.

**Cumulative Effects** - Although there have been minor short-term effects from some of the above activities, cumulatively they are not contributing to significant environmental effects when added to the direct effects of the proposed Master Development Plan for Lakeside Lodge Resort and Marina.