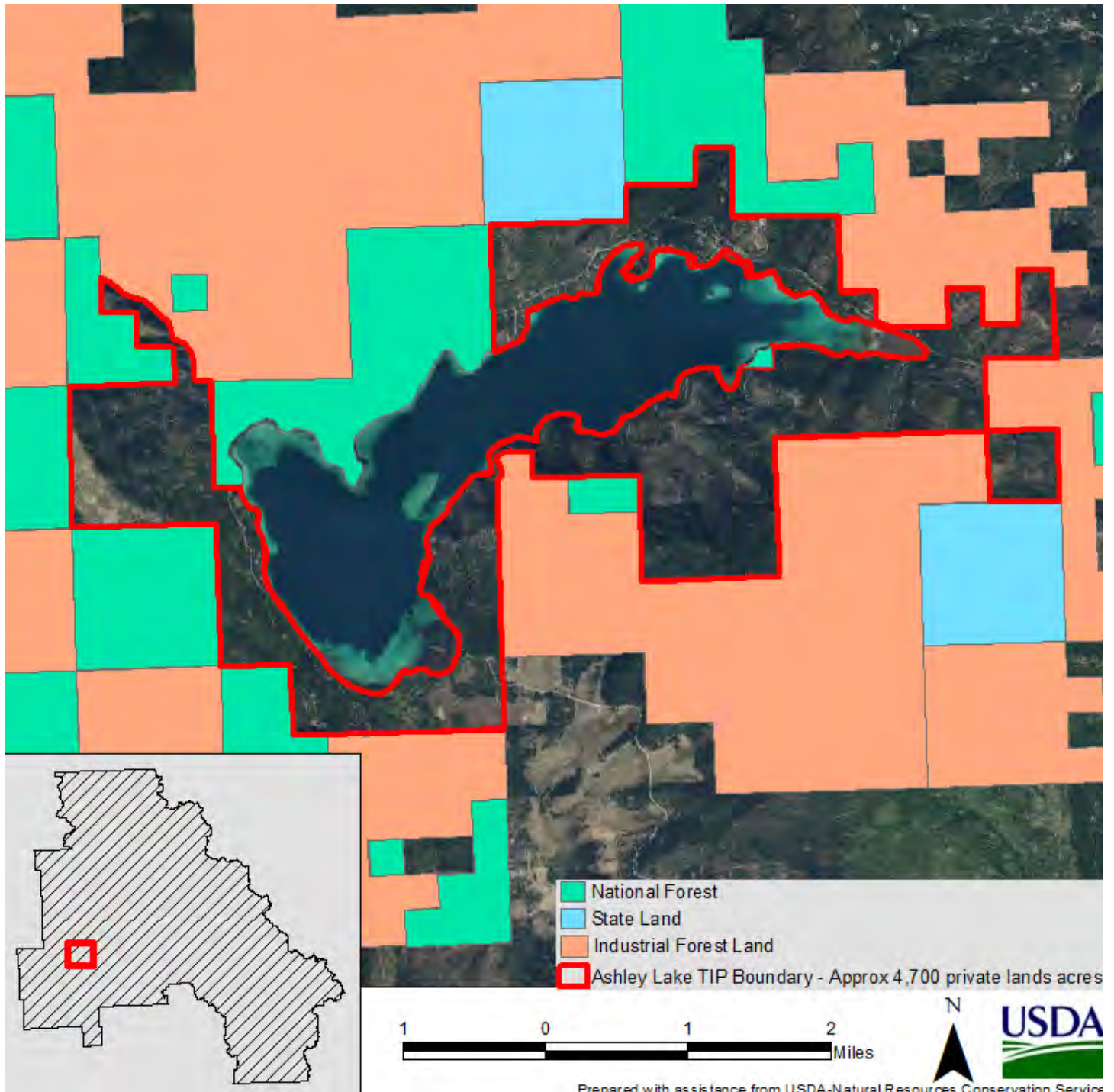


Ashley Lake Forest Health Targeted Implementation Plan

Flathead County

Promoting forest health and productivity by decreasing insect and disease issues, addressing present noxious weed populations, while also creating a more fire resilient forest within the Wildland Urban Interface.



Overview/Background Information

The Ashley Lake Forest Health Targeted Implementation Plan (TIP) includes all the private, non-industrial lands surrounding Ashley Lake totaling about 4700 acres. Adjacent to Ashley Lake parcels are generally smaller than 3 acres with parcels becoming larger the farther from the Ashley Lake shoreline. Private lands dominate the ownership directly surrounding Ashley Lake with a checkerboard of ownership between the US Forest Service, industrial timber companies, and larger private lands in the area farther from the lake (shown on title page map).

Within the identified TIP area, multiple species of trees have been negatively impacted by recent disease and insects, resulting in reduced forest health and increased fire risks associated with accumulating dead or downed dried fuels. Many of the properties surrounding Ashley Lake have seen dwarf mistletoe move into their Douglas fir stands that has stressed certain trees either causing mortality or weakening the tree to the point that insects have moved into the area as well. Identified insects include the fir engraver, which can also negatively impact grand fir, and wood boring beetles. As you look at some of the north facing hillsides, there is a growing number of red sub alpine fir trees due to increasing mortality amongst the species. This increase in mortality is caused by a myriad of problems that include up to 7 different causes per a DNRC entomologist. These disease and insect pressures will continue to spread, leading to a continued increase in tree mortality and the creation of fuels until more resistant species are managed for or the individual infected trees are removed from the landscape.

The area in this project is included in the Wildland Urban Interface (WUI) defined by the Flathead Counties Draft County Wildfire Protection Plan (CWPP) and was also included in the previous version of the CWPP. Sixty-seven percent of the parcels have a structure of some kind on the land with 81% being single family homes (Figure 1 & Table 1). The project is located within Area 2, West Flathead, of the Draft CWPP, which is a larger area encompassing most of the western part of the county (Figure 2). Past fires in this area have been large fires with southwestern winds which have been mostly stand replacement fires.

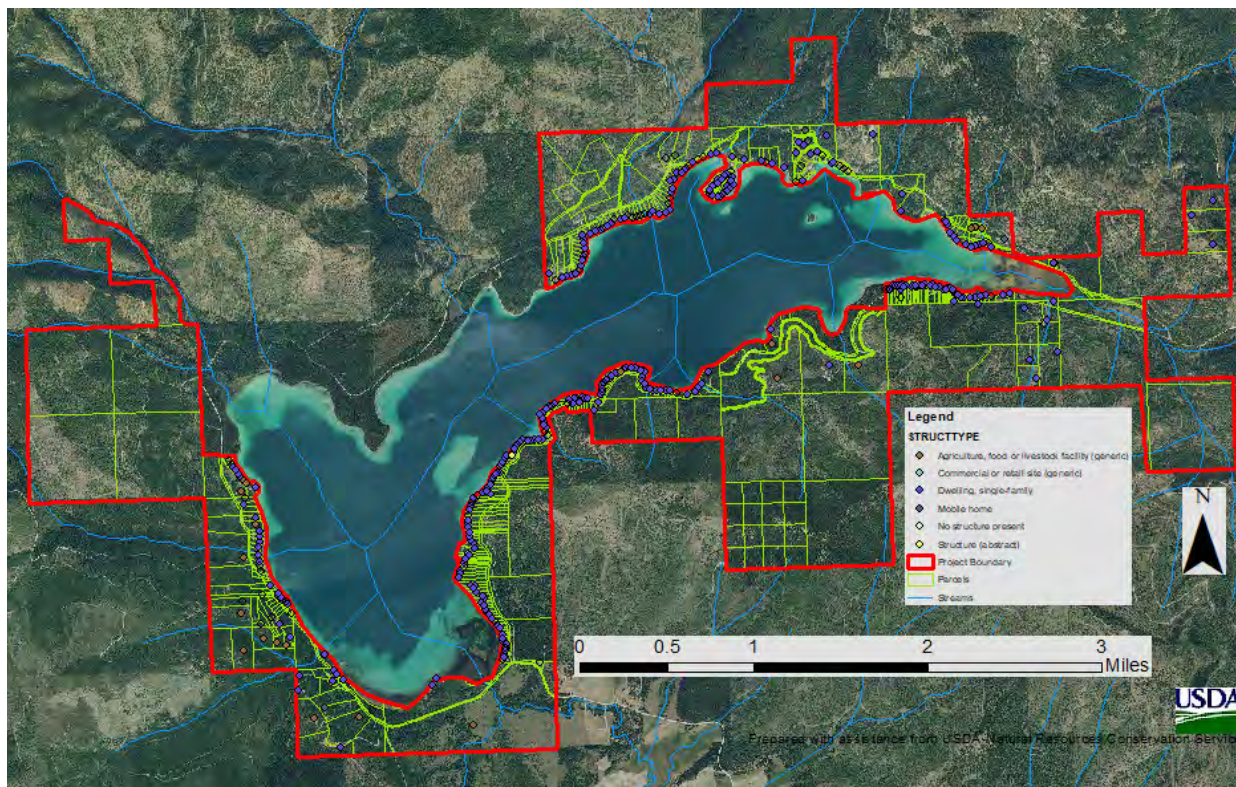


Figure 1. Ashley Lake TIP project area with parcels and structures.

Table 1. Number of structures broken down by acres of the parcel.

| Structures | Acres | | | | | Total |
|---|------------|-----------|-----------|----------|----------|------------|
| | 0 - 3 | 4 - 10 | 11 - 49 | 50 - 100 | > 100 | |
| Dwelling, single-family | 392 | 16 | 15 | 1 | 0 | 424 |
| Mobile Home | 3 | 1 | 1 | 0 | 0 | 5 |
| Agriculture, food or livestock facility | 18 | 3 | 8 | 1 | 2 | 32 |
| Commercial or Retail | 1 | 0 | 0 | 0 | 0 | 1 |
| Structure, abstract | 54 | 6 | 1 | 0 | 0 | 61 |
| Total Structures | 468 | 26 | 25 | 2 | 2 | 523 |
| No Structure | 179 | 41 | 22 | 4 | 12 | 258 |

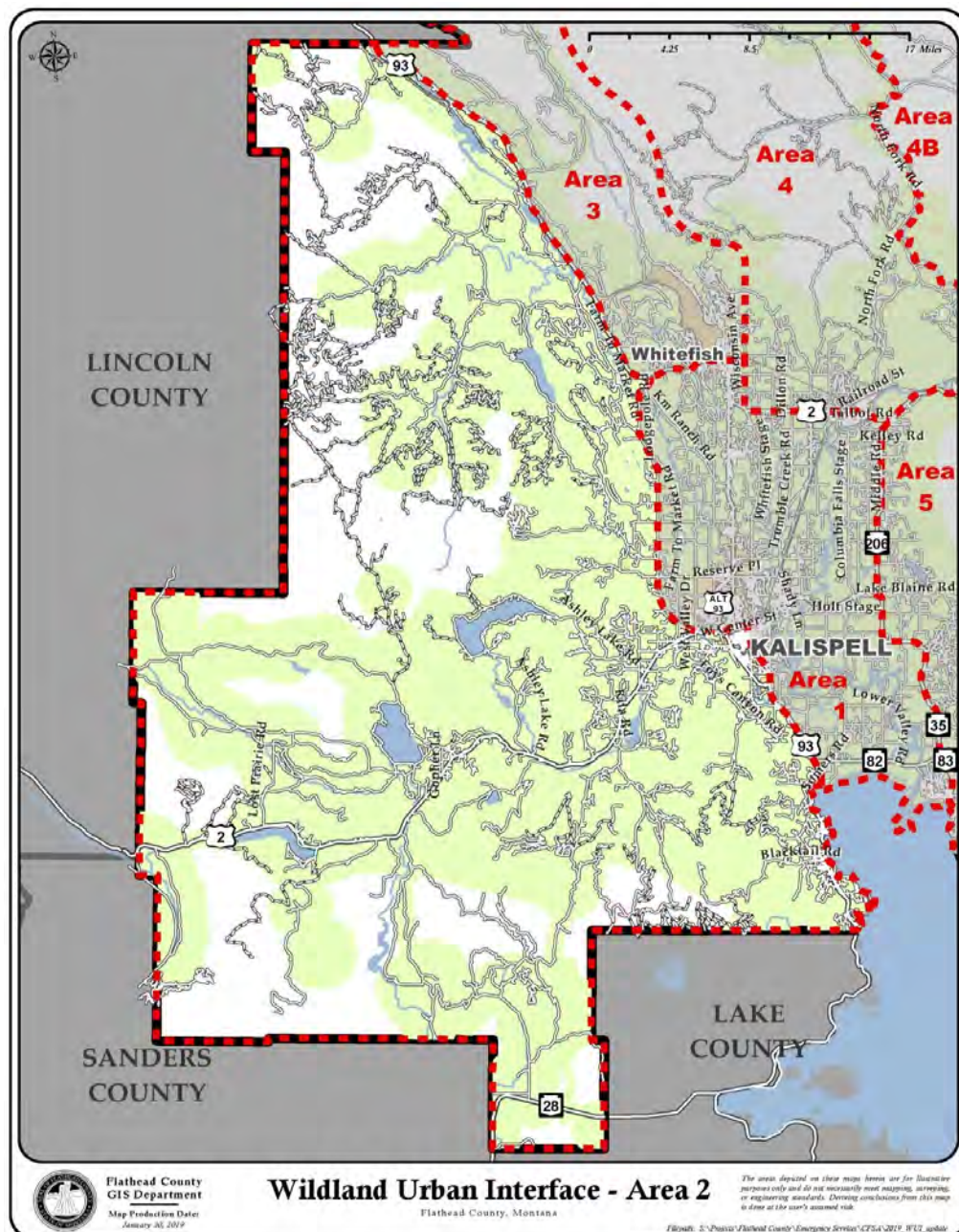
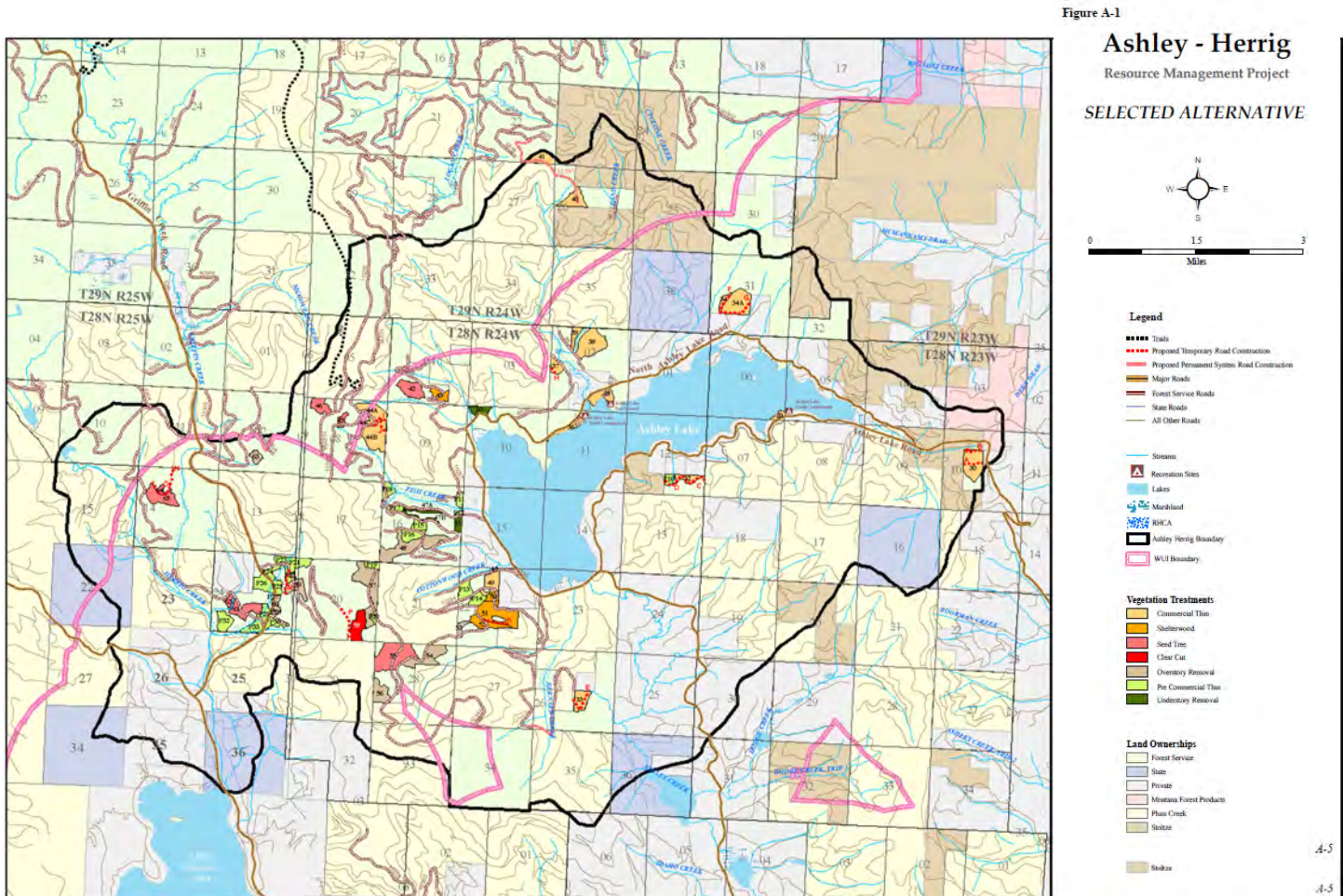


Figure 2. WUI Area defined in the Flathead County Draft CWPP, planning area 2 (Flathead West). All areas in green are included in the WUI. Source: Flathead County Draft CWPP.

Flathead County is heavily forested making forest health and fire preparedness among some of the most prevalent concerns in the county. The Natural Resources Conservation Service (NRCS) Kalispell Field Office (FO) has been very active in planning and implementation of EQIP forest management projects. The project area has been chosen because of the residents' interest in forest health and fire safe practices. Interest was gauged at a local meeting for the group called the Ashley Lake Property Owners Association (ALPOA) in addition to an email chain also sent out by the group. From this meeting and email chain interest has been expressed by many landowners that have property in the project area. In addition to interest by the local community in the project area there have also been conservation efforts in the areas surrounding the private land around Ashley Lake. The Forest Service has also been working with commercial and precommercial thinning on their lands in the Ashley Lake area (Figure 3).



The Flathead County Local Working Group, along with other partner organizations, have identified forestlands as the number one resource priority in the county. This TIP was developed in response to the recognition of the need to improve the resiliency of our forests while protecting homes and structures from catastrophic wildfires. The TIP also recognizes several growing resource concerns within this WUI area that have the potential to be devastating not only to forest resources, but also to life and property.

Problem Statement

The priority resource concern in the TIP area is plant health and vigor with other considerations being given to plant structure and composition along with fuels reduction. Tree stands in the project area can be characterized as being

densely stocked making them more susceptible to insect and disease outbreaks as described above which can cause mass die offs in the affected species. The health and vigor of these forests substantially decrease when trees are stressed from overcrowding. The overcrowding has been a result of previous forest management or lack thereof. Trees that are stressed grow slower and take longer to mature into a merchantable product.

A secondary resource concern that this project will help to address is wildfire hazard and biomass accumulation. Wildfires, especially low intensity fires, are natural in forest ecosystems. These types of fires leave live trees and a forest that can recover and regenerate after the fire. Fire management along with forest management in the past century has emphasized fire suppression, which has shifted the forests from fire resilient forests to densely stocked forests that are more susceptible to stand replacing fire events. Shifting species composition and a buildup of hazardous fuels has caused Flathead County to see more frequent catastrophic large fires than it has in the past.

With wildfires also comes the concern of people living within the WUI and their knowledge of wildfires and how they can prepare for a wildfire on their property. It is important for people that live in a WUI to know how they can decrease the likelihood of their homes and structures from being destroyed in a wildfire. This awareness is both important for the community members and firefighters who can better manage fires around structure if the proper precautions are taken.

Goals and Objectives

- 1) Improve forest health, increasing stand resilience to insects and diseases.
 - a. The Kalispell FO will work with landowners along with the Montana Department of Natural Resources and Conservation (DNRC) to create forest management plans that have an emphasis on overall forest health in addition to using NRCS practices to create healthy and resilient stands.
 - b. Work with partners, primarily DNRC, to identify insect and disease outbreaks in the project area that may have damaging effects on forest health and cause an increase in hazardous fuels.
 - c. Progress will be measured by overall acres treated while also looking at the reduction of pest and disease outbreaks.
- 2) Reduce hazardous fuels to minimize wildfire impacts and decrease the likelihood of stand replacing fire events.
 - a. This objective will go hand in hand with the above objective as many NRCS practices can be used to make stand resilient to both wildfire and insects and disease. The Kalispell FO will use NRCS practices to achieve this goal along with help from DNRC with creating forest management plans that emphasize forest wildfire resilience.
 - b. Progress will be measured by overall acres treated while also looking at stand density.
- 3) Address existing populations of noxious weeds.
 - a. To help prevent the further spread of noxious weeds both on the project site and also to adjoining parcels, identified noxious weeds will be controlled through the application where applicable.
 - b. Progress will be evaluated on an acres treated basis and relying on the landowners to conduct follow-up applications where necessary to continue to reduce noxious weed presence.
- 4) Increase awareness of defensible spaces around homes and structures, decreasing hazardous fuels in the home ignition zone.
 - a. One of the partners in this project, The Northwest Montana Hazardous Fuels Program, will be doing outreach about defensible spaces around homes and has a strong probability of also being able to provide funding for these activities.
 - b. Progress will be measured by communicating with partners on how many community members they have outreached to and had sign up for their programs.
 - c. The desired outcome is to increase awareness of fire safe practices while also increasing the number of community members that implement these practices around their homes and structures on their property.

Alternatives

Alternative 1: No action. Financial and technical assistance will not be provided by the NRCS Kalispell FO for forest health and resilience practices within the project area. Partners may still work in the area in the future but will not be prioritizing the area. Forest fuels will likely continue to increase which will increase the susceptibility to catastrophic fire events and decrease forest health.

Alternative 2. (Preferred) Use NRCS financial and technical assistance from the NRCS Kalispell FO along with partner assistance to address resource concerns. Practices will include Forest Stand Improvement (666), Woody Residue Treatment (348), Fuel Break (383), and Herbaceous Weed Control (315).

NEPA has already been completed and alternatives have been chosen by the US Forest Service for the projects surrounding the Ashley Lake TIP project area. The two US Forest Service projects taking place near the project area are the Ashley-Herrig Resource Management Project and the Lost Beetle project. Both projects are taking place in the Tally Lake Ranger District of the Flathead National Forest.

Alternatives will be analyzed in compliance with the National Environmental Policy Act (NEPA) and Endangered Species Act (ESA). Special consideration will be given to avoid and/or mitigate for practices effecting T/E species, such as Canada Lynx, in order to meet all federal regulations and NRCS policy requirements. Planning will also take into account the Bald and Golden Eagle Protection Act and Migratory Bird Treaty, avoiding known nesting sites. Any cultural resources present will be identified and avoided during planning and implementation of practices involving any federal action.

Proposed Solutions and Actions

The proposed solution is to use a suite of NRCS forestry practices to treat the resource concerns expressed above which will complement work being done in the area on both public lands and private industrial lands. All actions will take place in the WUI area surrounding Ashley Lake that is used in the Flathead County Draft CWPP (Figure 2). This project has already gained much interest in the community surrounding Ashley Lake which can be used to gain more engagement as this project continues for the proposed 5 years.

These practices will be used in the project:

Forest Stand Improvement (666) - can be used for several silvicultural treatments including pre-commercial thinning, sanitation harvests for stands with substantial insects and disease outbreaks, and others. Most of this work will be completed by NRCS with management plans mostly being written by the DNRC Service Forester in Kalispell.

Fuel Break (383) - can be used to aid in protection and defensibility of homes and structures. NRCS also partnering with the Northwest Montana Hazardous Fuels Program which uses monies from the Firewise program to create defensible spaces around homes in WUI areas.

Woody Residue Treatment (384) - can be used as a supporting practice after the above practices are implemented to aid with reduction or elimination of slash. Options will include piling and burning, chipping, shredding, and removal for utilization. Most of this work will be done through NRCS contracts.

Herbaceous Weed Control (315) - can be used to treat noxious weed infestation that can occur with forestry activities. Treatment can include chemical or biological application. This will be done through NRCS funding and technical assistance.

A combination of these practices can be used throughout the project area according to the goals and objectives of each participant and their forest management plan. Overall benefits from implementation of these practices will include a more healthy and productive forest that aligns with the participants forest management plan.

Participants can also benefit by working with partner organizations to meet management goals. Specifically creating defensible spaces around homes by using funding and technical assistance through the Northwest Montana Hazardous Fuels Program.

Partnerships

- Department of Natural Resources and Conservation - Flathead County Service Forester (Technical)
- Northwest Montana Hazardous Fuels Program (Technical & Financial)
- Flathead County FireSafe Council (Technical)
- US Forest Service (USFS)
- Flathead County Conservation District (Financial, Outreach)

For this TIP to be successful the Kalispell FO will have help from partners that are experienced and competent. DNRC's Service Forester will work closely with the Kalispell FO staff. Initial site visits will be made with NRCS and DNRC staff together if the applicant wants both agencies to be present. The bulk of the work that the DNRC Service Forester will take on will be to assist with writing forest management plans with landowners so that they can be eligible to participate in the program. This will help decrease the upfront planning workload for the Kalispell FO. The Service Forester may also assist with laying out of thinning units and site visits during contract if needed.

Another partner, the Northwest Montana Hazardous Fuels Program, will assist with creating defensible spaces around structures in the TIP area. The grants that this program has through Firewise are more applicable to this kind of work, as their main goal is to reduce hazardous fuels and increase defensible space. Monies from this program can be better used for specifically treating areas close to structures.

The Flathead Conservation District (FCD) will also be an active partner in a couple of capacities. To strengthen the forest stand improvement practices taking place through NRCS programs and overall TIP success, the district will also be pursuing tree plantings within the TIP area. These additional tree plantings will help establish site suited species in areas that have struggled with natural stand establishment or have been heavily impacted from disease and insect pressures in more susceptible species. The FCD has both a yearly cost share program and an annual tree seedling sale that will be utilized for landowners who are looking to plant tree for stand diversification in conjunction with the Ashley Lake TIP. These tree plantings will be coordinated jointly between NRCS and the FCD to ensure the correct species selection and planting rates are achieved to achieve the desired results. In addition to their yearly cost-share program, the FCD has also expressed the potential for establishing a special pool of money for addressing additional resource concerns within the TIP area along with considering the hosting of an MCC crew to complete a larger scale tree planting if it is deemed necessary to the success of the project.

The USFS has two projects in progress in the areas surrounding the TIP. Both projects are focused on fuel reduction with a suite of silviculture practices taking place that will help reduce hazardous fuels and create healthy forests that are resilient to insect and disease outbreaks.

Looking beyond the scope of this TIP there are multiple partners that have conducted landowner outreach along the three identified reaches of Ashley Creek (upper, middle, lower) which originates in the southwest corner of Ashley Lake. Ashley Creek has listed impairments of temperature, sediments, and nutrients resulting from agricultural practices, de-vegetation of the riparian area, and the degradation of natural buffers among other sources. With the existing outreach that has been conducted along with the strong interest of multiple partners at both the local and state levels, there is interest to use this TIP to treat the headwaters of Ashley Creek and then look to address some of the sources of the impairments on the different reaches of Ashley Creek following completion of this TIP. The goal of the potential follow-up Ashley Creek TIPs would be to target one or more of the listed impairments in attempts to reduce or potentially remove the impairment at least from certain stretches of the creek.

Implementation

This project is planned for a 5-year period as there has already been much interest expressed by landowners in the area and the Kalispell FO anticipates more interest as individual projects commence. Prior to TIP submission, NRCS heard interest from landowners representing approximately 2,000 acres. Not all acreage with expressed interest has the resource concerns this TIP proposed to address. Some of these lands have recently been logged or pre-commercially thinned to appropriate tree spacing. Of the 2,000 acres that have expressed interest it is estimated 600 of those acres may benefit from the EQIP practices proposed in this TIP. This 600 acre estimate constitutes 60% of the TIP goal to treat 1,000 acres at Ashley Lake.

Kalispell NRCS will have assistance from partners, mostly DNRC, to create forest management plans for landowners. All contracts with Kalispell NRCS will be written and managed by the Kalispell FO. Community members in the project areas may also have opportunities to apply for funding through partner organizations during the length of this project. The Kalispell NRCS will coordinate with partners on which landowners are best suited for either the NRCS program (EQIP) or for a grant program through a partner to accomplish their goals. All partners working on this project will communicate regularly on progress and implementation.

Kalispell NRCS will work with partners, mainly DNRC, to prioritize areas to focus efforts on. Prioritization will take in to account current forest health, looking at insect and disease issues already affecting the stand along with stand density. Hazardous fuels will also be looked at as a secondary priority for the project area.

Cost estimates are based on the 2020 EQIP cost list with approximately \$1060/ac. Actual costs may vary from year to year based on changes to the cost list and individual practices selected. Future budget projections have been conservatively estimated using anticipated producer interest, average property sizes, and engagement with landowners to date.

NRCS Deliverables

| Practice | 2020 | 2021 | 2022 | 2023 | 2024 | <u>Totals</u> |
|------------------------------------|--------|------|------|------|------|---------------|
| Forest Stand Improvement - CPS 666 | 200 ac | 300 | 300 | 100 | 100 | 1000 ac |
| Wood Residue Treatment - CPS 384 | 200 ac | 300 | 300 | 100 | 100 | 1000 ac |
| Herbaceous Weed Control - CPS 315 | 30 ac | 40 | 50 | 20 | 10 | 150ac |
| Fuel Break - CPS 383 | 5 ac | 5 | 5 | 5 | 5 | 25 ac |

Practice Cost Estimates Used for Calculations

| Practice | Cost Estimate/Acre |
|------------------------------------|--------------------|
| Forest Stand Improvement - CPS 666 | \$605.00 |
| Wood Residue Treatment - CPS 384 | \$415.00 |
| Herbaceous Weed Control - CPS 315 | \$100.00 |
| Fuel Break - CPS 383 | \$985.00 |

NRCS Financial Contributions

| Contributions | 2020 | 2021 | 2022 | 2023 | 2024 | Totals |
|---------------|-----------|-----------|-----------|-----------|-----------|-------------|
| NRCS EQIP FA | \$211,925 | \$314,925 | \$315,925 | \$108,925 | \$108,925 | \$1,060,625 |

Projected NRCS/Partner TA Contributions

| | Avg. Time to Complete (hrs) | Estimated Total hours for TIP |
|------------------------------------|-----------------------------|-------------------------------|
| Forest Management Plan Development | 30 | 1,200 |
| Plan Development | 8 | 320 |
| Contracting | 6 | 240 |
| Implementation/Certification | 20 | 800 |
| Totals | 64 | 2,560 |

Projected staff time for NRCS/partners is approximately 320 days.

Currently outreach has been done by ALPOA and can continue through this organization. It is also anticipated that word of the project will spread via word of mouth with neighbors communicating throughout the community. If there seems to be a lack of knowledge of the project in the area at any point during the 5 years, the Flathead County Conservation District has offered to fund a mailing to the landowners in the project area.

Prioritization and Ranking

State Prioritization Questions:

1. Has the applicant had a NRCS program contract terminated since January 1, 2017; OR does the applicant have an existing contract that has been determined to be in noncompliance and currently under an active NRCS-CPS-153 (only answer a Yes if the non-compliance was for something within the participant's control)? If yes, identify the following:
Date of Termination or date participant signed the NRCS-CPA-153 with an existing deadline to bring the contract back into compliance _____
 - a. Yes - Application is a LOW priority.
 - b. No - Continue to question 2.
2. Is the proposed conservation treatment within the geographic boundaries of this Targeted Implementation Plant (TIP)?
 - a. No - Application is a LOW priority and will not be ranked.
 - b. Yes - Continue to question 3.
3. Does the application meet the intent of the Targeted Implementation Plan, (TIP) and is for practices currently offered in the TIP that will treat the identified priority resource concern?
 - a. Yes - Application is a HIGH priority and will be ranked.
 - b. No - Application is a LOW priority and will not be ranked.

These local ranking questions will be applied to all applications applying for the Ashley Lake Forest Health TIP to determine funding allocation priority.

1. Addressing disease and insect pressures negatively affecting overall forest health
 - a. Does the application include stands that have identified disease or insect problems in 2 or more tree species?
 - b. Does the application include stands that have identified disease or insect problems in 1 tree species?
2. Are the acres planned to be treated located adjacent to properties on which there is previously completed pre-commercial thinning (private, industrial, state, or federal lands all apply)?
3. Will the application include the treatment of existing populations of noxious weeds?
4. Will the project result in the reduction of fuels along ingress/egress routes?
 - a. Primary ingress/egress (Ashley Lake Rd, N Ashley Lake Rd)
 - b. Secondary ingress/egress

Progress Evaluation and Monitoring

There will be inventories that take place both before any practices are initiated to determine acres, stocking rates, stand conditions, and species composition. Data from these inventories can then be compared to inventories taken after a practice is completed to determine progress in the project area. Each practice that is completed as part of an NRCS contract will be certified to meet NRCS standards and specifications by the Kalispell NRCS staff. Progress will be recorded through mapping and certifications in Conservation Desktop. The Kalispell NRCS will also communicate with partners on acres of progress on both writing forest management plans and creating defensible spaces around homes.

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Ashley Lake Forest Health Targeted Implementation Plan Addendum

Through the ALPOA face to face meeting and email network, outreach was conducted to determine initial interest directly surrounding Ashley Lake in forest management in August. As a result of those initial outreach efforts, 22 landowners have contacted the office to express their interest in the program for future participation. This is a mix of large tract ownership and the small parcel owners directly on the lake.