

Public Communication Plan
Lowell Observatory/Observatory Mesa Fuels Reduction Project
July 2026



The Astronomy Discovery Center

Painting of the Astronomy Discovery Center by
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Introduction

Coconino County received a Congressional Directed Spending (CDS) award, which was secured by Senator Mark Kelly and former Senator Kyrsten Sinema's offices, to manage and administer the Lowell Observatory/Observatory Mesa Fuels Reduction Project (Lowell Observatory Project). The goal of the Lowell Observatory Project is to improve forest health and its' sustainability and reduce wildfire risk to Lowell Observatory, the City of Flagstaff, and Coconino County.

The Greater Flagstaff Forests Partnership (GFFP) is the grant subrecipient and is managing the project. Partners realized the need to conduct forest treatments (thinning trees and/or prescribed fire) on Section 17, the last parcel on Observatory Mesa that had not been treated. Consequently, GFFP scoped and planned the project, developed a budget, and authored the awarded CDS proposal. Adding to the CDS award, Lowell Observatory, the City of Flagstaff, and Salt River Project have contributed funding towards the project. Coconino County is the recipient of the CDS funding and the County Flood Control District is administering the award as well as assisting GFFP in executing the project. The City of Flagstaff is also a key partner and is assisting GFFP in accomplishing this project (see Partners section on page 6 for more detailed information on partners and their roles).

For more detailed information, see page 6 for "Key Messages and Talking Points" and a topically delineated "Question and Answer" section.

Project Background

The Lowell Observatory Project is in Coconino County and lies within the northwest portion of the City of Flagstaff on Observatory Mesa (see Figure 1). Observatory Mesa is approximately one mile from City Hall and downtown Flagstaff.

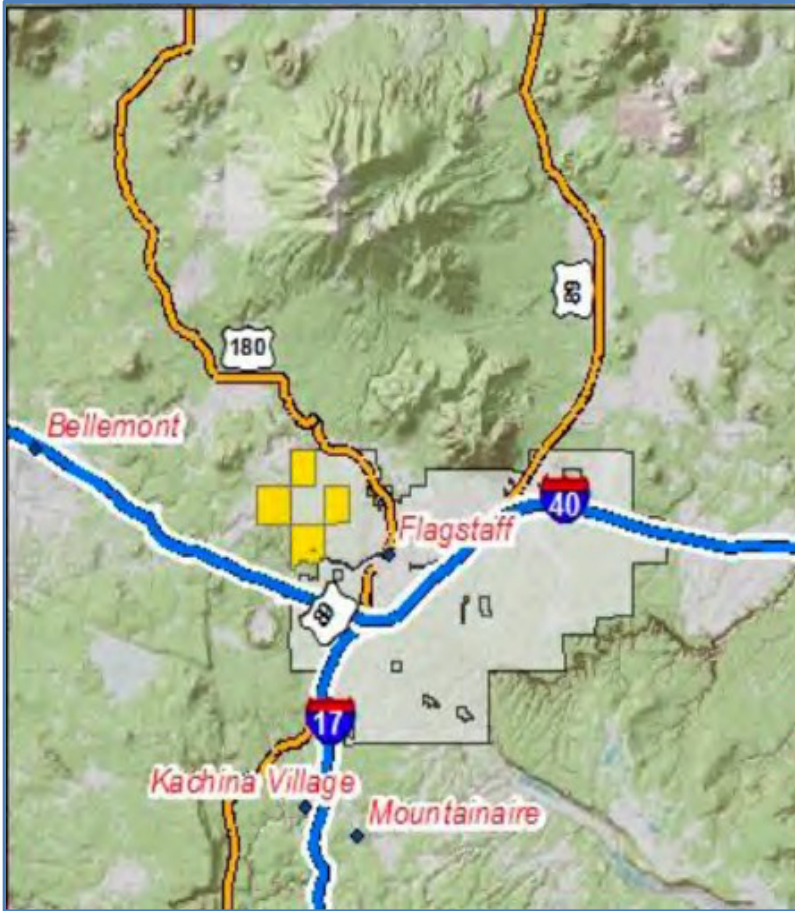


Figure 1. Observatory Mesa Natural Area in the City of Flagstaff

A severe crown replacing wildfire on Observatory Mesa would not only cause irreputable damage from the wildfire itself, but also there is a strong possibility that post-fire flooding would follow the wildfire and run downstream off the Mesa into Thorpe Park, the BNSF Railway, historic neighborhoods, and the heart of downtown Flagstaff.

The Observatory Mesa Natural Area consists of four sections that were treated through thinning small diameter trees and prescribed fire as part of the Flagstaff Watershed Protection Project (FWPP). Section 17, owned by Lowell Observatory, lies on the southeast corner of the Natural Area, directly east of Section 18 (see Figure 2).

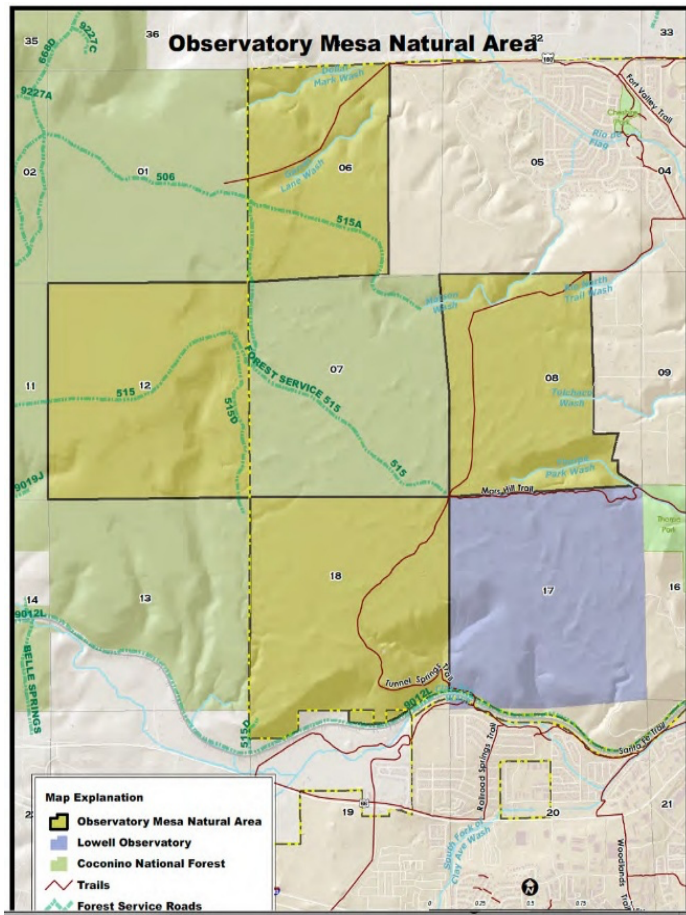


Figure 2. Observatory Mesa Natural Area and Section 17

In the middle of the Observatory Mesa Natural Area is section 7, which is managed by the U.S. Forest Service, and thinning operations were completed in the summer of 2023. Now that Section 7 is complete, Section 17 is the only parcel that has not been treated on Observatory Mesa and presents increased wildfire risk for the entire mesa, as well as the City of Flagstaff and infrastructure that runs through and is close to Section 17.

The Lowell Observatory Project will complement the treatments that have already occurred on the four sections in the Observatory Mesa Natural Area as well as U. S. Forest Service Section 7. Given that this is the only section that has not been treated, this will further increase the reduction in wildfire risk and the overall resiliency of the forest. Not only will the risk of wildfire be reduced, but also, thinning will decrease the presence of insects and disease, like mistletoe and bark beetle. The Lowell Observatory parcel is depicted below, and this aerial view provides a sense of the dense forest conditions on Section 17 compared to the already treated Sections (see Figure 3).

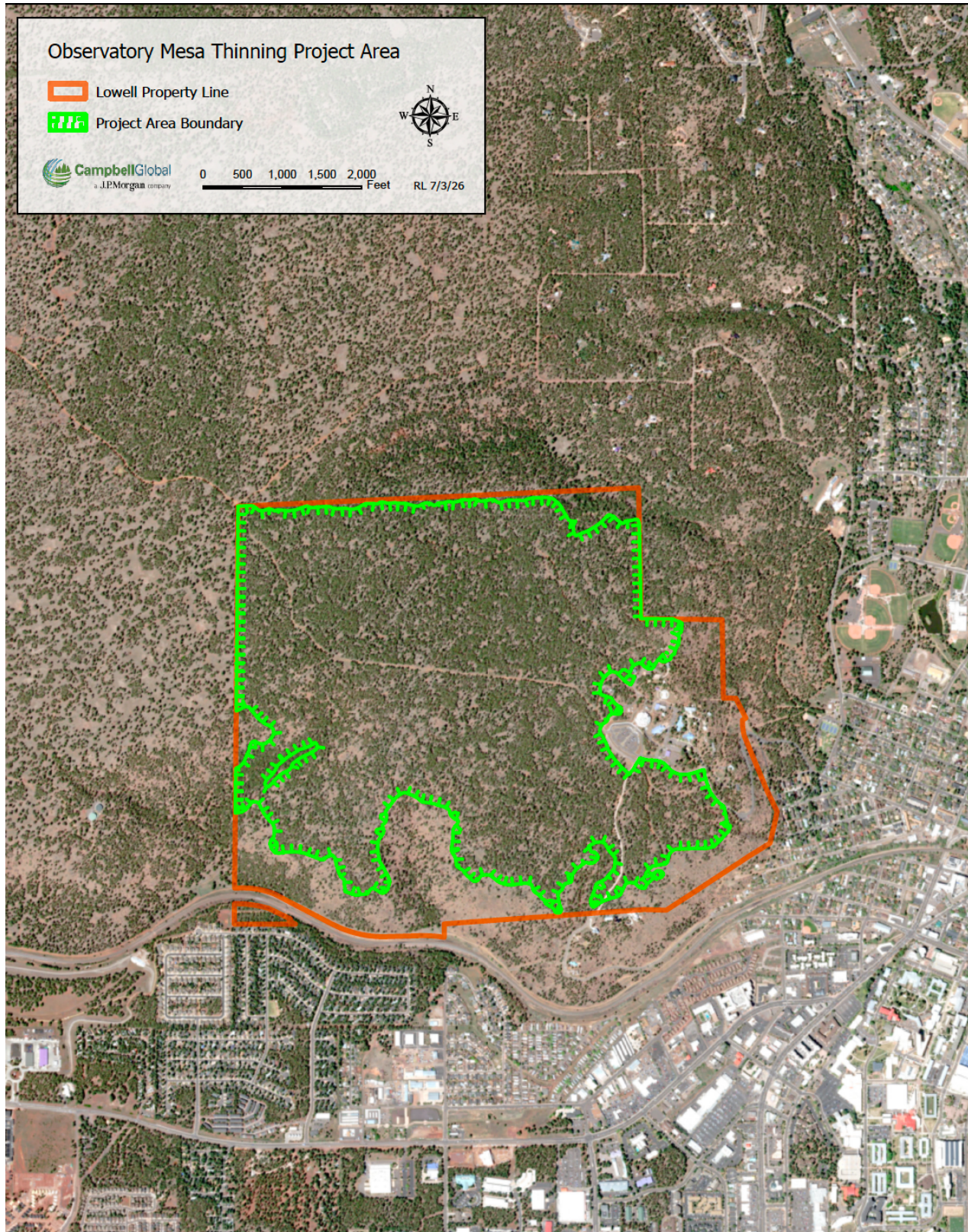


Figure 3. Aerial View Lowell Observatory Project / Section 17

Key Messages and Talking Points

This section provides further information regarding the project, including questions and answers. If further information is required, please contact GFFP's Project Manager, Anne Mottek at admin@gffp.org.

Key Messages

Project Goal The goal of the Lowell Observatory Fuels Reduction Project is to improve forest health and its' sustainability and reduce wildfire risk to Lowell Observatory, the City of Flagstaff, and Coconino County.

Message Thinning small diameter trees across Section 17 and Mars Hill will restore the ponderosa pine forest and reduce the risk of uncharacteristically severe wildfire from impacting not only Lowell Observatory, but also the entirety of Observatory Mesa, proximate neighborhoods on the Mesa and downstream of the Mesa, and the City of Flagstaff.

Talking Point Thinning treatments support forest restoration objectives and reduce the risk of severe wildfire on Observatory Mesa. Historic fire suppression is one of several factors that has created forest conditions where local forests are overgrown with dense stands of small to medium sized trees. Reducing wildfire risk includes significant thinning to reduce smaller and overcrowded trees. These smaller trees act as ladder fuels that can carry fire to the larger trees resulting in an out of control crown fire, so the smaller and/or medium sized overcrowded trees need to be removed.

After a forested area is thinned, it may suddenly appear much more open. These treatments are ensuring our forests are healthier and more resilient to crown replacing wildfire, while also being restored to resemble a more historic forest structure. Initially, treated areas will change in appearance, but the long term effects will increase understory diversity (wildflowers, herbaceous cover, and shrubs), and ultimately, the trees are more resilient to insects, disease and wildfire.

Message Treatments include thinning and creating defensible space for Lowell Observatory.

Talking Point The majority of Section 17, which primarily lies west of the Observatory and Mars Hill, which lies south and west of the Observatory, will be thinned mechanically with conventional ground based equipment. These treatments will provide defensible space and firebreaks for Lowell Observatory by removing trees that are in proximity to structures on the campus of Lowell Observatory, the Discovery Center, and close to Mars Hill Road.

Questions and Answers

Background, organizations involved, funding

Q: Which organizations are involved and are supporting the project?

A: The Greater Flagstaff Forests Partnership, Campbell Global, City of Flagstaff, Coconino County Flood Control District/Forest Restoration Initiative, Salt River Project, Coconino National Forest, Flagstaff

Watershed Protection Project, Lowell Observatory, and Ecological Restoration Institute are all working together to complete this important project.

Q: Who is managing the project?

A: The project is managed and administered by the Greater Flagstaff Forests Partnership (GFFP), an established not-for-profit, since 1996, that has a long history and experience in managing and administering fuel reduction projects.

Q: Which company will oversee the on-the-ground implementation?

A: The on-the-ground implementation will be managed by Campbell Global, an established reputable local firm, with professional foresters who manage forest restoration projects. The GFFP and Campbell Global have worked together on several cost-share grant projects and have formed a strong and successful partnership to effectively complete on-the-ground fuel reduction projects throughout the Greater Flagstaff region.

Q: Which logging company is doing the thinning work?

A: Hammer Logging, LLC has been selected to conduct the thinning treatments on the Lowell Observatory Project. This firm has been operating in Arizona since 2023. They were selected based on a prior proven performance, availability, and cost. Hammer Logging has partnered with an Arizona-based company, Chippin-in, for the biomass removal.

Q: What is the history of Lowell Observatory, and why is this project so important to the Observatory?

A: Lowell Observatory has a long history. The observatory was established by Percival Lowell on May 28, 1894, and for over 100 years, has connected visitors and scientists to the universe. Percival Lowell was initially interested in potential life on Mars; thus, as an iconic landmark and renowned overlook that you pass on the way up to Lowell Observatory that is famous for its view, is known as “Mars Hill.” In 1965, the Observatory was designated a Registered National Historic Landmark, and in 2005, recognized as an Arizona Treasure by Governor Janet Napolitano. Lowell Observatory itself has a multitude of unique highly technical and historic telescopes and instruments. For example, Lowell Observatory is the site of the historic 24-inch Clark Refractor telescope. The telescope itself is housed in its original fully wooden dome, including a set of Ford tires on which the dome rests and turns.

Fairly recently, Lowell Observatory constructed the Discovery Center, which is a 40,000 square foot state-of-the-art facility that welcomes over 100,000 visitors annually. Given this rich history and the magnitude Lowell Observatory plays in enriching scientific and cultural aspects for the Flagstaff community and its visitors, reducing wildfire risk is paramount to continuing Percival Lowell’s vision and mission.

Q: How is this project funded?

A: The Greater Flagstaff Forests Partnership (GFFP), City of Flagstaff, and Campbell Global began scoping the project so that GFFP could apply for a Community Wildfire Defense Grant (CWDG). Through multiple field tours and meetings with Lowell Observatory, a project plan and budget was developed. As GFFP was

beginning the CWDG proposal, GFFP became aware of an opportunity to jointly apply with Coconino County for available Congressionally Directed Spending (CDS). GFFP and Coconino County prepared proposals for two projects and both Coconino County Flood Control District (FCD) and GFFP received the award. Coconino County FCD is the Recipient of the award, and GFFP is the Subrecipient. GFFP is administering this portion of the CDS grant and is working closely with the FCD to ensure the project is conducted efficiently and effectively. The CDS funding was secured by Senator Mark Kelly and former Senator Kyrsten Sinema's offices.

In addition to the CDS award, the City of Flagstaff, Lowell Observatory, and Salt River Project are contributing funding towards the project. Collectively, these organizations are not only funding the project but also are contributing their time and expertise to assure its success.

Q: Who owns the land/Section 17, and what is the land ownership nearby?

A: The project is located on privately-owned land held by Lowell Observatory. Four sections on the mesa, owned by the City of Flagstaff, is within the Observatory Mesa Natural Area, which is designated as open space. Section 7, that sits in the middle of the Observatory Mesa Natural Area, is owned by the U.S. Forest Service (USFS). Section 17, where treatments will occur, is adjacent or close to the City and USFS' parcels and is the only parcel on the mesa that has not been treated.

Thinning operations

Q: What is involved in the thinning process?

A: The project's on-the-ground prescription will focus on fuel reduction, which includes thinning small-diameter ponderosa pine trees and/or medium sized overcrowded trees. This will reduce ladder fuels and increase tree crown spacing. The treatment is designed to reduce the probability of the smaller and overcrowded trees carrying fire into the crowns of adjacent and larger trees, resulting in reducing overall wildfire risk. Current stand conditions comprise tree density ranging between 60-300 trees per acre with a Basal Areas ranging from 60-180 ft² per acre. The prescription designates that once thinning is completed, the residual stand will comprise a 40-70 BA ft² with tree density averaging 50-70 trees per acre.

Thinning operations will occur on about 530 acres with conventional mechanical equipment, such as a feller buncher and skidder. In addition, all biomass (tree limbs and tops) will be removed from the site, which will further reduce wildfire risk. Approximately 145 acres have fewer trees or are already fairly open, and will require little to no treatment, depending on site conditions. In the next several years, the City of Flagstaff Fire Department will conduct hand thinning treatments along Mars Hill Road and in areas that are difficult for mechanical equipment to access.

Many organizations like the US Forest Service, Ecological Restoration Institute (ERI), City of Flagstaff, and Coconino County Flood Control District's Forest Restoration Initiative use the best available science to determine the type and intensity of forest restoration treatments designed to improve forest health. The prescription, or how the forest will be thinned, has been collaboratively developed, science based, and validated with years of experience and corresponding results.

Q: How will the logs be used?

A: Logs, suitable for a finished wood product, will be hauled off site for processing at a pallet facility in Phoenix. All of the biomass (tree limbs and tops) will be hauled off site and converted to energy at a biopower facility.

Q: When will the project begin, and how long will the project last?

A: The estimated start date is July 10, 2026. Mechanical thinning and biomass removal is estimated to last through the end of the year, barring any unforeseen delays (e.g., fire restrictions, weather).

Q: How many acres are you thinning?

A: The project area encompasses approximately 675 acres that comprise Section 17, Mars Hill, Lowell Observatory, as well as five residences of Observatory staff located on Mars Hill. Some areas will be deferred because they have fewer trees and are less dense or are on steep slopes. In total, approximately 530 acres will be mechanically thinned and 145 acres will be deferred.

Q: Will all of Section 17 be thinned?

A: The majority of Section 17, which primarily lies west of the Observatory and Mars Hill, which lies south and west of the Observatory, will be thinned.

Q: How do you know the thinning will be effective?

A: In Flagstaff, there are several examples where wildfires reached a treated area of the forest, and the fire dropped to the ground sufficiently enough that firefighters were able to contain the blaze. For example, the 2012 Hardy and 2006 Woody Fires were contained due to previous treatments in the fires' path. Results during these fires proved treatments work, and studies have shown that denser areas of the forest, with ladder fuels, can carry fire into the crowns of the trees and explode into an uncontrollable crown fire. The aftermath of crown fires has shown that the economic consequences of these fires are far higher than the cost of treatments.

For more information see: <https://gffp.org/wp-content/uploads/2018/01/Insert.pdf>

Q: Will I hear the equipment being used for thinning, and when will it occur?

A: Thinning operations will include heavy equipment that you may be able to hear from a distance, depending on your location and the relative topography. Thinning operations may occur throughout the night depending on fire restrictions. In general, operators begin very early, sometimes at 3:00 AM, and end at approximately 5:00 PM, but these times may vary throughout the project timeline. Operations are generally conducted on weekdays, but some weekends and nighttime implementation may be added depending on weather factors, fire restrictions, and red flag days.

Q: What is the haul route?

A: Haul routes will use existing forest road systems and will not travel down Mars Hill Road. It is estimated that 850 loads of logs and biomass will be removed. The logs and biomass will be hauled on Forest Service Road 515 that travels through A1 Mountain to Interstate 40.

Q: Given heavy logging equipment will be on the Mesa, what precautions are taken for unintentional fires?

A: The logging operator will have a 1000 gallon fire wagon (pump, hoses, nozzles, etc.) on site during operations. In addition, required fire tools are on each piece of equipment.

Prescribed fire

Q: Will prescribed fire be used in this project?

A: There are no prescribed burns included in this project.

Q: What's the importance of including prescribed fire?

A: Since the ponderosa pine forest is a fire adapted ecosystem, meaning these forests adapted to frequent low intensity fires that crept slowly on the ground, prescribed fire is a necessary component of enabling conditions that promote a healthy, sustainable forest. Prescribed fire is usually implemented a few years after thinning has been completed. Prescribed fire is necessary to maintain the treatments so that regeneration of ponderosa pine is controlled. In addition, prescribed fire returns nutrients to the soil and improves the overall health of the forest. This is apparent in the forests' condition after prescribed fire has been applied. The low intensity fire encourages regrowth of native wildflowers and other herbaceous understory. The end result provides increased diversity of flora and fauna, which supports wildlife and promotes a healthy and balanced ecosystem.

Use of Observatory Mesa - public safety and impacts to recreation

Q: How will the project impact hiking trails and recreation opportunities around Lowell Observatory and on Observatory Mesa, and what can recreationists do to stay safe?

A: At times when logging will occur near popular trails, like the Flagstaff Urban Trail System (FUTS) that border the project and social trails that run through Section 17, the section of the FUTS that is adjacent to Section 17 and proximate social trails will be closed for short periods. Once logging operations are completed, the FUTS bordering Section 17 and other social trails in Section 17 will reopen. Hikers, and other recreationists will see signage, and the closure dates will be posted on the GFFP, Lowell Observatory, City of Flagstaff, and Coconino County websites. It is very important for the public's safety that trail closures are abided by and recreationists use other trails that will be open like in the Observatory Mesa Natural Area. See below for alternate trails recreationists can use.

Click [here](#) for an Observatory Mesa Natural Area trail map or type this URL into your browser:

https://flagstaff.az.gov/DocumentCenter/View/88418/GOMA_Proposed-31925?bidId=

Q: During logging operations, what does the public need to know in order to stay safe?

A: Expect to see heavy machinery in the forest and log trucks on forest roads. Residents and visitors should absolutely avoid areas as mechanical thinning operation are occurring.

Logging trucks will depart on FS Road 515 and proceed to A1 Mountain Road and then travel to Interstate 40. If you are driving and see logging trucks on the road, use caution.

Site and/or trail closure announcements will be advertised through press releases; GFFP, Lowell Observatory, Coconino County, and City of Flagstaff websites; social media announcements; and e-mail lists. Signage for site and/or trail closures will be posted as needed for any detours, trail closures, or thinning operations.

Q: Will Lowell Observatory be open to visitors while thinning operations are being implemented?

A: Thinning operations will not affect visitation to the Discovery Center at Lowell Observatory.

Ecosystem considerations

Q: Will older large trees be thinned?

A: Old trees will not be cut. This is because these trees are less abundant in the forest, and they are more resilient to wildfire. The thick platy bark on mature ponderosa pine trees adapted to exist in a frequent fire system. Therefore, older trees are more resistant to wildfire and will be retained, unless they are severely diseased/infested or present a safety hazard.

Q: How is wildlife considered?

A: The project team consulted with Arizona Game & Fish and the U.S. Fish & Wildlife Service. Their recommendations were considered and incorporated into the prescription of the forest treatment. Dead and down trees will be left on site to benefit insects and wildlife.

Outreach, Community Impact

Q: What kind of community outreach are you doing to keep people informed about the project?

A: A broad community outreach program is being developed and planned. Community outreach events, press releases, and meetings with community members, leaders and interest groups will be conducted to inform community members about the expected operations, the benefits this project will provide, and to alleviate any concerns about operations on Observatory Mesa/Lowell Observatory. In addition, materials concerning the project will be available on all of the partners websites (e.g., City, County, GFFP, Lowell Observatory, etc.)

Q: How will this project impact local quality of life?

A: Reducing wildfire risk through implementing this project on the Mesa will greatly improve the quality of life for residents and visitors alike. Four sections on the mesa, owned by the City of Flagstaff, are within the Observatory Mesa Natural Area, which is designated as open space. According to the City of Flagstaff, "Open space defines the region's quality of life, protects the region's ecological health, supports existing

and future economic development, and preserves historic and cultural resources.” Likewise, the Mesa is a favorite recreational area and includes the Flagstaff Urban Trail System (FUTS) and other social trails on Section 17.

Monitoring

Q: What types of monitoring will be conducted?

A: Monitoring of the project will occur to assess the change in the forest’s condition before and after thinning implementation. The Ecological Restoration Institute, City of Flagstaff’s GIS Department, and Coconino County Forest Restoration Initiative will conduct various forms of monitoring projects listed below.

1. Ecological Restoration Institute: Conduct pre- and post-monitoring using terrestrial LIDAR to illustrate and determine changes in forest conditions before and after thinning treatments. This data will be used to verify the drone-based LIDAR data collected by the City of Flagstaff (see #2 below), which will improve its accuracy.
2. City of Flagstaff GIS Department: Conduct pre- and post-monitoring using drone LIDAR to illustrate and determine changes in forest conditions before and after thinning treatments.
3. Coconino County Flood Control District: Collect plot-based data and photo points, pre- and post-treatment, to assess the change in the forest’s condition before and after thinning operations.

Partners (see Appendix A on pg. 14 for Partner websites)

Many partnering agencies and organizations are involved in this project. Below is a list of the organizations and a brief summary of their roles.

1. **Campbell Global:** Supervising on-the-ground logging operations.
2. **City of Flagstaff Fire Department:** Assisting with planning, outreach to local neighborhoods, and public safety.
3. **City of Flagstaff IT/GIS Department:** Assisting with pre- and post-monitoring using drone LIDAR to illustrate and determine changes in forest conditions before and after thinning treatments.
4. **Coconino County Flood Control District Forest Restoration Initiative:** Recipient of the CDS award. Administering the award to GFFP as a Subrecipient and assisting with administrative tasks, planning, outreach, field surveys, and monitoring.
5. **Coconino National Forest:** Assisting with access on Forest Service roads and consultation.
6. **Ecological Restoration Institute:** Assisting with pre- and post-monitoring using terrestrial LIDAR to illustrate and determine changes in forest conditions before and after thinning treatments.
7. **Flagstaff Watershed Protection Project (FWPP):** Complementing treatments that have occurred in the FWPP project area (City of Flagstaff’s Observatory Mesa Natural Area) and on a U.S. Forest Service Section that are adjacent or close to the Lowell Observatory Project.

8. **Greater Flagstaff Forests Partnership (GFFP):** Subrecipient of the Congressional Directed Spending award and managing and administering the project.
9. **Lowell Observatory:** Lowell Observatory is the private landowner and is working with GFFP and the other partners to successfully complete the thinning treatments and ensure public safety on Section 17 and Mars Hill.

Mission/Vision Lowell Observatory and GFFP

Lowell Observatory Mission

The mission of Lowell Observatory is to pursue the study of astronomy, especially the study of our solar system and its evolution; to conduct pure research in astronomical phenomena; and to maintain quality public education and outreach programs to bring the results of astronomical research to the general public.

Greater Flagstaff Forests Partnership Vision

To research and demonstrate the various approaches to forest ecosystem restoration in the ponderosa pine forests, our actions are based on improving the overall sustainability and resiliency of the forests in the greater Flagstaff area and throughout Northern Arizona. Sustainable and resilient forests are those that have the capacity to recover to pre-disturbance composition, structure, and/or function over time and can be maintained for future generations of forest users. As GFFP works toward future sustainability and resiliency of our forests and communities, our efforts focus on 1) multi-agency planning and coordinated and complimentary implementation of forest restoration projects, 2) monitoring and adaptive management, 3) utilization of woody biomass, and 4) outreach and education.

Appendix A – Partner Websites

[Ecological Restoration Institute](#)

[Campbell Global](#)

[City of Flagstaff Wildland Fire Management](#)

[Coconino County Flood Control District](#)

[Coconino County Forest Restoration Initiative](#)

[Coconino National Forest](#)

[Flagstaff Watershed Protection Project](#)

[Greater Flagstaff Forests Partnership](#)

[Lowell Observatory](#)

[Salt River Project](#)