

**April 2, 2024** 

| Agenda Item | Ashland Forestlands Climate Adapto                     | shland Forestlands Climate Adaptation Project Funding                         |  |  |  |  |
|-------------|--|---|--|--|--|--|
| From        | Chris Chambers   | Forestry Officer  |  |  |  |  |
| Contact     | Chris. Chambers@ashland.or.us                          |   |  |  |  |  |
| Item Type   | Requested by Council  Update   Consent  Public Hearing | □ Request for Direction □ Presentation □ New Business □ Unfinished Business ⊠ |  |  |  |  |

#### **SUMMARY**

At its March 19<sup>th</sup> business meeting, the City Council approved an initial budget for the Ashland Forestlands Climate Adaptation Project (Option #2) but ran out of time to consider the full scope of the project proposal (Option#1). Council and Mayor also requested further clarification on "pile and burn" expenses listed in all options. The options are presented in a condensed table in the accompanying presentation with further expense explanation along with further explanation of the pile and burn expense difference between options.

#### **POLICIES, PLANS & GOALS SUPPORTED**

City Council Goal: Address Climate Change

City Council Goal: Reduce Wildfire and Smoke Risk

**City Plans**: Ashland Natural Hazard Mitigation Plan, Community Wildfire Protection Plan, 2016 Ashland Forest Plan

and 2023 Forest Plan Climate Change Addendum.

**Citizen Budget Goals**: Wildfire Safety was the highest budget priority from resident in-person and online polling in spring 2023.

#### **BACKGROUND AND ADDITIONAL INFORMATION**

Recent drought and extreme heat have created what researchers call a "decline spiral" in Douglas-fir trees, a species that has proliferated on lower elevation City and APRC lands due to past logging and cessation of indigenous burning practices. In response to a significant uptick in dead and dying trees, the City commissioned a drone-based survey of impacted municipal forestlands. We found just over 20% of Douglas-fire were dead or visibly dying. Further data from local U.S. Forest Service researchers has since shown at least an additional 25% (range of 20% to 60%) of trees that appeared green during summer of 2023 were already infested with bark beetles and will likely die this coming spring. Climate change projections for coming years show that Douglas-fir will continue to die, making it imperative that the City respond quickly to prevent the build-up of fuels shown to cause significant ecological and private property damage during fires.

Following guidance in the 2016 Ashland Forest Plan and 2023 Climate Change Addendum, staff and the Ashland Forestlands Management Advisory Committee proposed Phase One of a Climate Change Adaptation Project to quickly address increased fire danger from dead/dying trees and begin the critical work of helping our forests adapt to changing conditions. Public meetings and tours were offered to help inform the planning effort. In November, Council approved a contract with Lomakatsi Restoration Project to assist the City with marking dead, dying, and overcrowded forests for a future helicopter-based thinning project, part of Phase One implementation. This proposed contract with Timberline Logging Enterprises, LLC represents a significant





investment in the safety of our community and the sustainability and <u>long-term survival of our local forests</u> that are a cornerstone of Ashland's local culture and economy.

The project addresses safety concerns along trails and roads where hundreds of dead trees need to be removed for public safety. Importantly, the project also reduces risk to critical infrastructure at the City's Water Treatment Plant and along the course of Ashland Creek where dead trees falling into the flood zone threaten the City's water supply pipelines, road crossings, culverts, and downstream to the plaza itself.

Forests across the west are under significant stress from climate change, resulting in permanent loss of forest cover in the southwest and the southern Sierra Nevada, and a shifting of climate zones resulting in <u>"zombie forests"</u> all the way into Northern California and likely Southern Oregon as well. Proactively addressing these issues is the most fiscal, ecological, and protective course of action for the community's interest and safety.

#### **FISCAL IMPACTS**

The current budget dedicated to wildfire and forest management is insufficient to pay for this unexpected cost. City Administration, Finance, and Fire Department have identified revenue to cover the added cost of this work. Project partner Lomakatsi Restoration Project recently pledged \$150,000 of federal funding and future in-kind labor to assist with pile and burn expenses, invasive species management, and replanting. Revenue from log sales as a by-product of this work will also offset a significant portion of the costs.

The previous Council decision allocated needed funding for Option 2. Council can choose to adopt Option 1, which would maximize the project outcome and footprint. By adopting Option #1, a gross increase in expense of \$340,616.12 with a projected offset through log value of \$161,320.40. This leaves \$188,260 that will be identified through department budgets.

A separate Budget Supplement will be brought to Council to recognize the unplanned expense and offsetting log value revenue.

#### SUGGESTED ACTIONS, MOTIONS and/or OPTIONS

"I move that the City Council, approve an additional \$340,616.12 expenditure toward the Ashland Forestland Climate Adaptation Project, of which \$188,260 will be allocated from existing City funds."

#### **REFERENCES & ATTACHMENTS**

Presentation Slides With Budget and Refined Expenses



### Direct project cost comparison without fixed costs

| Per acre summary of direct      | pro  | iect expenses        |        |                    |       |              |    |
|---------------------------------|------|----------------------|--------|--------------------|-------|--------------|----|
| Helicopter and Cutting          |      | Option 1             |        | Option 2           |       | Option 3     |    |
|                                 |      | 1,295,946.00         | \$     | 1,000,069.50       | \$    | -            |    |
| Trucking                        |      | 190,080.00           | \$     | 146,520.00         | \$    | -            |    |
| Pile and Burn Expenses          |      | 150,000.00           | \$     | 150,000.00         | \$    | 990,000.00   | ** |
| Timber Tax (2024)               |      | 5,147.45             | \$     | 3,967.83           | \$    | -            |    |
| Lomakatsi Contracted Help       |      | 75,000.00            | \$     | 75,000.00          | \$    | 50,000.00    |    |
| Monitoring                      |      | 20,000.00            | \$     | 20,000.00          | \$    | 20,000.00    |    |
| TOTAL EXPENSE                   | \$   | 1,736,173.45         | \$     | 1,395,557.33       | \$    | 1,060,000.00 |    |
|                                 |      |                      |        |                    |       |              |    |
| BN Budget                       | \$   | 406,374.00           | \$     | 406,374.00         | \$    | 406,374.00   |    |
| Lomakatsi Grant                 |      | 150,000.00           | \$     | 150,000.00         | \$    | 150,000.00   |    |
| Log Value Return                |      | 686,127.00           | \$     | 524,806.60         | \$    | -            |    |
| TOTAL REVENUE                   | \$   | 1,242,501.00         | \$     | 1,081,180.60       | \$    | 556,374.00   |    |
| *NET EXPENSE                    | \$   | 518,356.08           | \$     | 330,095.57         | \$    | 503,626.00   |    |
| Cost Per Acre                   | \$   | 1,047.18             | \$     | 807.08             | \$    | 1,017.43     |    |
| *With 5% contingency            |      |                      |        |                    |       |              |    |
| **Includes all tree falling, lo | g cu | itting, trail cleari | ng, li | imbing, piling, ar | d bur | rning        |    |



## "Pile and Burn" Budget Explanation Scenario #1: Helicopter Tree Removal Sequence

- 1. A tree cutter cuts a marked tree along a trail. One cut is made and he moves on. One tree, one person, one "touch".
- 2. The tree is blocking the trail. The helicopter removes the entire tree to the landing where it's processed by machine, called whole tree yarding. Limbs and tops are dealt with by machine and either burned or chipped centrally.
- 3. This cost is all included in the helicopter pricing package.
- 4. In this scenario, nearly half the cost is recouped by selling the merchantable portion of each tree.
- 5. Minimal piling and burning of broken branches in the forest is covered by Lomakatsi grant.



Whole tree yarding removes trunk, branches and top to a centralized landing.



# "Pile and Burn" Budget Explanation Scenario #2: No Helicopter Tree Removal Sequence

- A tree cutter cuts a marked tree along a trail.
- Tree is blocking the trail...
  - Cutter has to cut the tree off the trail which is time and gas consuming. If the log is big enough, it would require two people to move it safely without it rolling downhill.
  - Same worker has to cut a dozen or more limbs off the tree as well as the top, for fuel reduction. Many limbs require two cuts each. Second person collects all the limbs and top and puts them into a burn pile, or multiple piles.
  - This takes two people, significant time, dozens of touch points by hand...a lot of time and cost.
- Another crew returns the next fall/winter/spring to burn each burn pile, monitor the piles and patrol the area for at least two days after burning.
- In this scenario, there is no financial return and the number of logs on the ground becomes a wildfire and logistical liability for decades to come, adding more real and hidden cost.



### More Option #3 trade-offs

- Concentrated slash burning at the landing allows for efficient use of machinery and one efficient burn pile that will minimize smoke. It also leaves the option of chipping material if possible and affordable.
- Distributed burn piles in the forest (over 1000 piles, Option #3) are small and inefficient, producing much more smoke with no option to chip any of it.
- Larger machines handling large volumes of wood via Options #1 and #2 is more efficient than hundreds of chainsaw two-cycle engine hours.
- More burn piles in the forest over the summer (Option #3) equals more fire risk to the community vs. removing the fuels and dealing with it before fire season this year (Options #1 and #2). Burn piles could stay for up to two years, depending on burn windows.
- Smaller green trees still need to be thinned in Option #3 even if no helicopter was used in the project.
- Trails are closed for a longer period in Option #3