



USDA - Forest Service

CIP BUSINESS CASE TEMPLATE (PROJECT SUBMISSION)

PROJECT INFORMATION

After completing the form, check the box at the bottom to perform a data validation check.

<i>Project Title</i>	<input type="text" value="R615 Tiller Fire Warehouse"/>
<i>Control Number(s)</i>	<input type="text" value="5589.004171"/>
<i>Project Lead</i>	<input type="text" value="Beagle, John C -FS"/>
<i>Region/Station</i>	<input type="text" value="6-Pacific Northwest"/>
<i>State</i>	<input type="text" value="Oregon"/>
<i>County</i>	<input type="text" value="Douglas"/>
<i>Unit</i>	<input type="text" value="Umpqua National Forest"/>
<i>District</i>	<input type="text" value="Tiller Ranger District"/>
<i>Asset Type</i>	<input checked="" type="checkbox"/> Facility

Is this project submitted for National Consideration or Regional Tracking?

Which of the following best describes your project?

Project Background

The Tiller Ranger District in Tiller, OR, supports fire, recreation, and timber sale operations in the southern portion of the Umpqua National Forest. Tiller is one of the most active districts on the forest for fire.

Project Description

This project would add a fire warehouse to protect engines and provide resources to allow better response to fire and management of fire support resources.

Other Project Information

The forest has a successful model for building a fire warehouse using Pre-Engineered Metal Buildings. This warehouse would use established procurement methods that were successfully used elsewhere on the forest. Design costs will be minimal.

Attachment(s)

R615_UMP_Tiller Fire Warehouse - 5YearIntegratedRestoration Plan.xlsx
 R615_UMP_Tiller Fire Warehouse - Executive Summary.docx

Attachment Links (e.g., Pinyon)

PROJECT DETAILS

Will this project be completed in multiple phases?

Over how many years?

Is external funding verified and available?

	Year 1	Year 2
Phase	Design	Construction
External Funding	\$0	\$0
Forest Service Funding	\$50,000	\$780,000
CMFC	\$50,000	\$780,000
CMRD	\$0	\$0
FLTP	\$0	\$0
CMTL	\$0	\$0
Other*	\$0	\$0
Total Project Cost	\$830,000.00	

*If "Other" Forest Service sources are to be used, please identify these sources

BENEFIT AREAS

Does this project support **Active Management**?

Project Criticality

*This project **contributes substantially** to the success of Active Management and there is no substitute asset(s) to fully replace the function of this asset(s). If this project is not completed, the ability to conduct Active Management will be severely restricted, resulting in major delays or severe impacts to quality.*

Acreage of hazardous fuel treated/suppressed due to this project acres

Please identify the hazardous fuel reduction project(s) that this CIP supports

Expected volume (in thousand board feet) of timber harvest resulting from this project over the next 10 years - [Reference](#) mbf

Please identify the timber project(s) that this CIP supports

Does this project support **Fire Operations**?

Project Criticality

*This project **contributes substantially** to the success of Fire Operations and there is no substitute asset(s) to fully replace the function of this asset(s). If this project is not completed, the ability to conduct Fire Operations will be severely restricted, resulting in major delays or severe impacts to quality.*

What is the Wildfire Hazard Potential at this location? (1-5 scale) -[Source](#)

Is this project located at a Wildland-Urban Interface (WUI)? -[Source](#)

Does this project support **Recreation and Public Access**?

Does this project support **Environment and Sustainability**?

Does this project support **Research & Development**?

Does this project provide **Economic Benefits**?



Project Criticality

*This project is **absolutely essential** to providing Economic Benefits. If this project is not completed, the ability to provide Economic Benefits will be at risk of being eliminated.*

Projected **annual** revenue generated by permits, leased acquired lands, or fees

Expected **annual** future cost reduction/avoidance

Explain how this project is expected to reduce/avoid future costs

How much deferred maintenance will be eliminated as a result of this project?

RISK AND READINESS CRITERIA

Assessment Status

Has a transportation analysis been completed?

Is an environmental assessment required?

Has a HUD assessment been completed?

Has a Heritage assessment been completed?

Has a SHPO process been completed?

Has a Hazmat assessment been completed?

Has a Value Analysis been completed?	<input type="text" value="No"/>
Have the Accessibility Transition Plans been completed?	<input type="text" value="N/A"/>
Is the asset included in future asset plans ?	<input type="text" value="Yes"/>

Project Maturity

Have the project attributes been verified by the project lead?	<input type="text" value="Yes"/>
Has the design been approved by the proper authorities?	<input type="text" value="No"/>
How complete is the design?	<input type="text" value="30 %"/>
How old is the cost estimate used for this submission?	<input type="text" value="0"/> months
What level of fidelity was used in calculation of this cost estimate?	<input type="text" value="Class 3"/>

Class 3 represents an estimate based on 15-30% project development, generally for design development or budget authorization. These estimates are developed by semi-detailed unit cost and assembly line items. The estimate accuracy varies from -5% to +20%.

Has the project lead verified that the capacity exists to execute this project within the next year?	<input type="text" value="Yes"/>
What is the earliest this project can be started?	<input type="text" value="1+ Years"/>
Has jurisdictional control/approval been acquired?	<input type="text" value="N/A"/>

Provide other information not covered on this section including justifications for N/As

30% design is complete from a similar fire warehouse. Getting to 100% won't require much cost or effort. Planning is in process and will be complete well ahead of design.

INFORMATIONAL DATA

This information is intended to support additional decision-making and reporting requirements as applicable.

Does the project address non-compliance with Federal Law?	<input type="text" value="No"/>
Have climate vulnerability assessments been considered on this project?	<input type="text" value="No"/>
How many acres will be planted/supported as a result of this project?	<input type="text" value="0"/>
What is the current facility/asset condition?	<input type="text" value="0"/>
Does the affected asset have critical findings with respect to health and safety?	<input type="text" value="No"/>

Other information:

Although project is at 30% maturity, a jump to 100% will be very quick using the Pre-Engineered Metal Building (PEMB) model used elsewhere on this forest and the region.

Check this box to perform a validation check.

R6 Capital Improvement Program (CIP) Project Executive Summary
Tiller Ranger Station - Fire Warehouse
Umpqua National Forest, Oregon

Project Type: Facilities (Fire Warehouse)

Project Description: The Tiller Ranger District has some of the highest fire activity on the forest (Level 5) and has the most Wildland-Urban Interface issues, yet does not have adequate fire warehouse facilities. Currently, two Type-3 and one Type-6 engine are stored outdoors (investment of over \$500,000). Poor storage conditions lead to additional maintenance and an increase cost in FOR/USE. Additionally, having proper storage facilities will enhance ability to respond to events and to manage the hazardous fuels reduction.

Background Information: In 2010 the Forest successfully designed and bid a Pre-Engineered Metal Building (PEMB) on another district. This project would take that model and update it as needed to meet specific requirements of the unit. The design is at a 30% level but using the PEMB construction method could go to 100% in less than a year once funded.

Other Project Details: Alternative sites have been reviewed by specialists and a preferred site has been selected. If funded, all remaining (minimal) in-house planning would be done in FY2020, followed by a relatively simple 100% design in FY2021 and construction in FY2022.

Estimated Costs:

Costs are based on a 30% design coupled with using existing data from the 2010 fire warehouse project and projected to FY21/22 using construction cost inflation data.

BENEFIT AREAS

- Fuels
 - Acres of Haz Fuels treated/suppressed
 - There are 19,100 acres of hazardous fuels identified for treatment over the next 10 years as identified in the 10-Year Restoration Plan (attached to this CIP submittal).
 - The District is undertaking a high priority large landscape scale planning effort in addition to growing their base program. These efforts will require adequate infrastructure, including a fire warehouse to house and secure expensive engines and equipment necessary to meet objectives.

Fire Operations (suppression)

- Fire Operations (suppression)
 - Wildfire hazard potential (2014 National Data)
 - The land served by the Tiller Ranger District has many areas in the **Very High (Level 5)** wildfire potential category.

- Tiller has a significant amount of Wildland-Urban Interface within its boundary that is also at Very High risk of potential wildfire.

Economic Benefits

- Expected annual future cost reduction or avoidance:
 - Outdoor storage of \$530,000 worth of engines is estimated to double the cost of maintenance (sun damage, water damage, seals dry out, cost to winterize and de-winterize, etc.). This is estimated at an additional 4% of net value per year, or \$20,000 in additional maintenance costs.

Assessment Status:

Risk and Readiness and Project Maturity

This project is at a 30% design using past projects as a template. From experience, we know that going from 30% to 100% using a Pre-Engineered Metal Building will take less than one year. If funded, we would complete the final planning documents in FY2020, design in FY2021, and construct in FY2022.

INFORMATIONAL DATA

Photos:



Warehouse constructed on North Umpqua Ranger District in 2011 – This proposed warehouse would be similar

