



# Karuk Tribe Transportation System Maintenance Plan



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**Presented by the National Indian  
Justice Center**

**Under the Caltrans Tribal Engagement and Technical Assistance Project #74A0980.5**



# Agenda

- What is a Maintenance Plan?
- Summary of SR5
- About the Templates
- Maintenance Plan Template
- Equipment Maintenance Log Template
- How to use the Templates

# What is a Maintenance Plan?

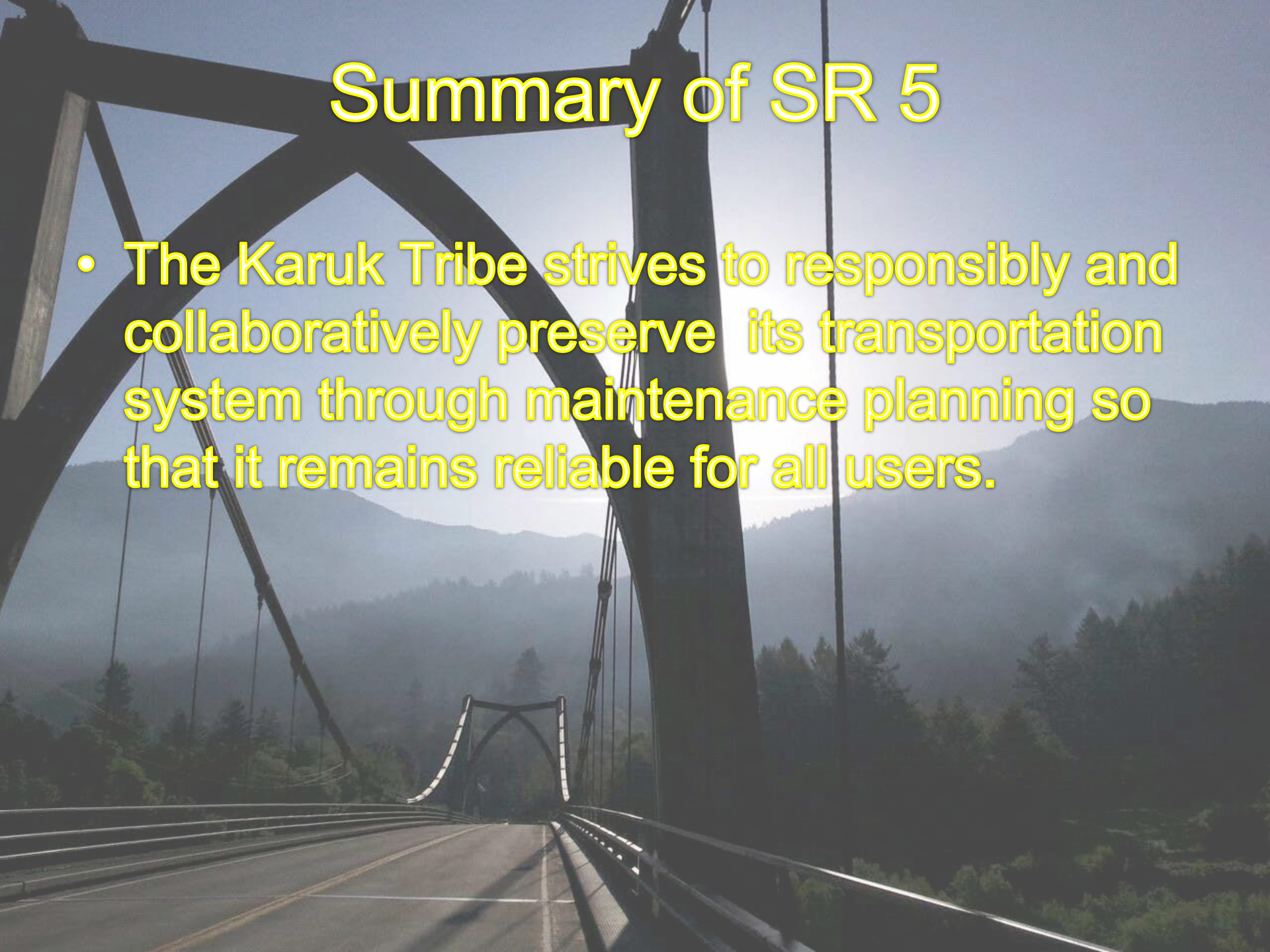
- A maintenance plan is a “living document” including schedules and reports which are updated periodically to reflect changes in maintenance policies, practices, equipment, and program improvements”.





# Summary of SR 5

- The Karuk Tribe strives to responsibly and collaboratively preserve its transportation system through maintenance planning so that it remains reliable for all users.



# Summary of SR 5

- The Karuk Tribe maintains transportation facilities and assets in 3 locations spread over 115 miles. This poses challenges to the Tribe for scheduling and tracking transportation maintenance activities.
- The Tribe needs simple maintenance tracking tools and methods. Tribal maintenance personnel have varying capacities to operate computer software.



# Summary of SR 5

- Objectives: Provide a maintenance plan template, web-based training session, site visit and follow-up technical assistance to increase the Tribe's capacity to develop its long-term transportation system maintenance plan.

# About the Templates

- The Maintenance Plan and Equipment Maintenance Log templates can be modified and used as tracking tools by the Karuk Tribe in coordination with its transportation system plans and operations. These tools may be useful for other tribes in California.



# Maintenance Plan Template

KARUK TRIBE TRANSPORTATION SYSTEM MAINTENANCE PLAN																		
							2020											
Task	Activity	Tribal Personnel Assigned	Other Personnel	Tribal Equipment	Rental or Other Equipment	Materials & Supplies	Winter			Spring			Summer			Fall		
	<u>Routine &amp; Preventative</u>						Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov
1	Vegetation																	
1.1	Inspect Vegetation																	
1.2	Mowing of Vegetation																	
1.3	Tree and Brush Trimming																	
1.4	Maintenance of Vegetation																	
1.5	Removal of Vegetation																	
1.5.1	BIA Route 1075 – Vegetation Clearing	John Doe	Engineer Contractor	Mechanical weed control, deck mowers		Shovels, tree shears, grapples, fuel	X			X			X			X		

**EXAMPLE**

# About the Templates

- Maintenance Plan Template Functions
  - The rows in the template illustrate a seasonal/monthly timeline and overarching maintenance tasks and sub-tasks in particular maintenance sectors.

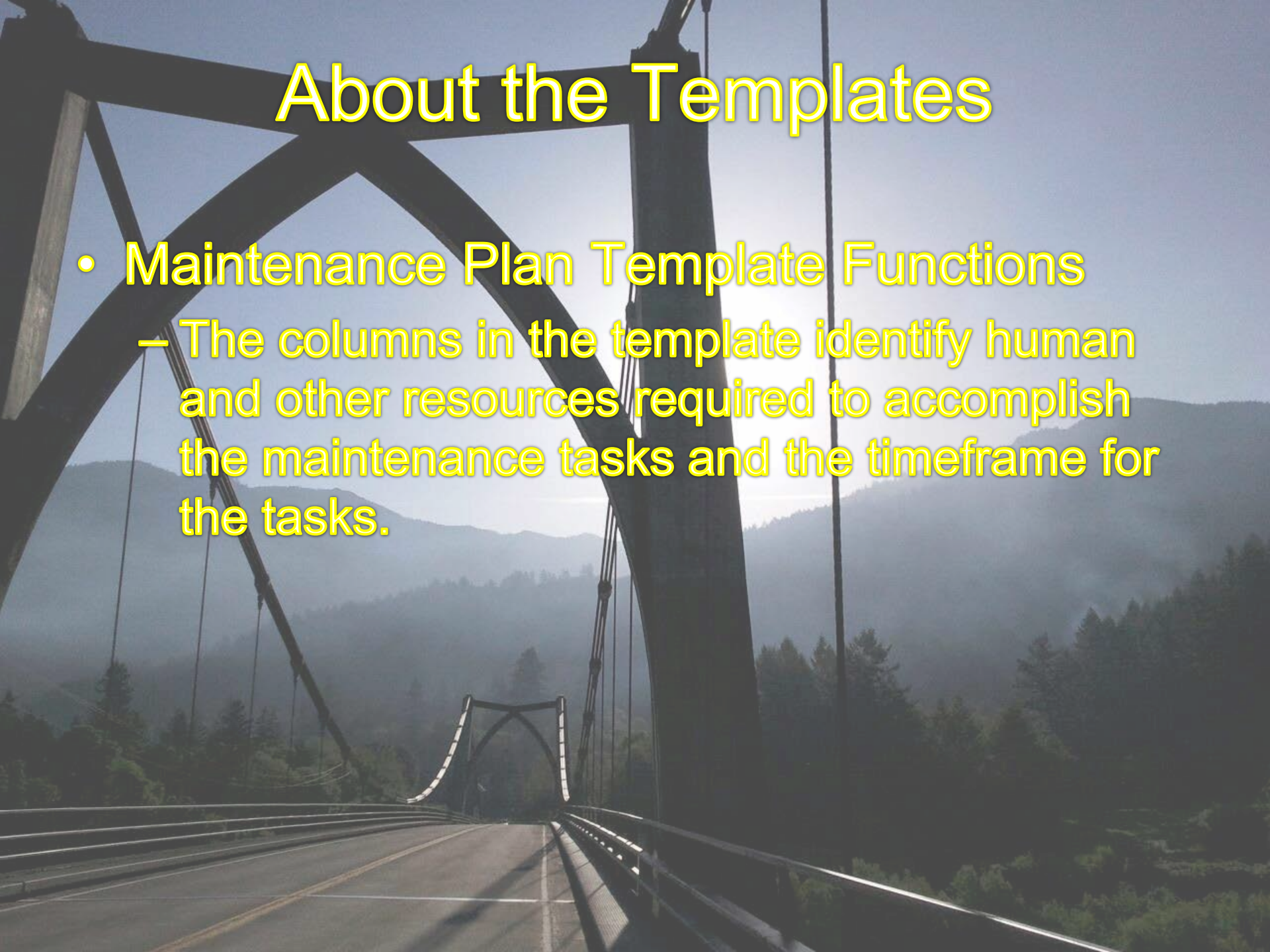


# About the Templates

- Maintenance Plan Template Functions
  - Rows
- Identify and track tasks by major activities, sector, sub-task, and routes and facilities, such as **routine maintenance: ditches and culverts: route #: inspect culvert for blockages.**

# About the Templates

- Maintenance Plan Template Functions
  - The columns in the template identify human and other resources required to accomplish the maintenance tasks and the timeframe for the tasks.





# About the Templates

- Maintenance Plan Template Functions
  - Column

- Identify the **tribal personnel and other personnel (contractors, tribal or cooperating jurisdictions)** assigned or needed to accomplish the maintenance task.
- Other agencies and independent contractors may be participating in the maintenance. Cultural monitoring may be needed.

# About the Templates

- Maintenance Plan Template Functions
  - Column
- Identify the **tribal equipment, rental/other equipment and materials and supplies** needed to accomplish the maintenance task.



# About the Templates

- Maintenance Plan Template Functions
  - Column

- Identify the season, month(s) or day(s) required to accomplish the maintenance task.



# About the Templates

- The template is designed to facilitate cost estimating or budgeting for each maintenance task/sub-task.



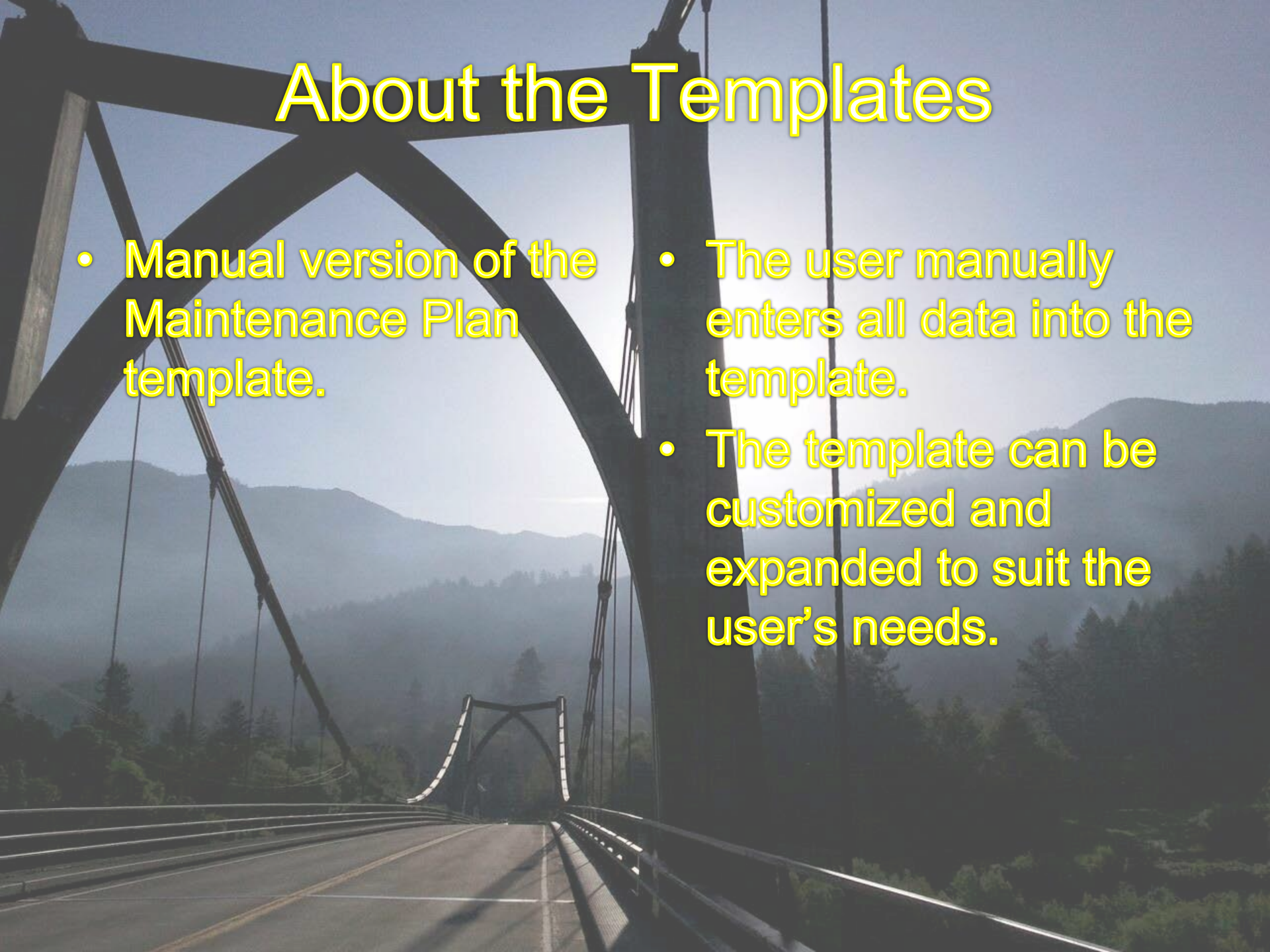


# About the Templates

- There are two versions of the Microsoft Excel based Maintenance Plan template, including one with the option of drop-down lists.
  - Adding drop-down lists is easy!
  - We will demonstrate how to add drop-down lists in Excel further on in the webinar. The Template Guidance Document contains a Tips and Tools section where you can learn more.

# About the Templates

- Manual version of the Maintenance Plan template.
- The user manually enters all data into the template.
- The template can be customized and expanded to suit the user's needs.





# About the Templates

- Drop-down list version of the Maintenance Plan template.
- The user creates drop-down lists for each column and can select from the lists to develop the plan.
- The lists can be customized and expanded to suit the user's needs.

# About the Templates

- Drop-down list version of the Maintenance Plan template.

## Quick Snapshot of a Drop-down list

Task	Activity	Tribal Personnel Assigned	Other Personnel
	Routine & Preventative		
1	Vegetation		
1.1	Inspect Vegetation	<input type="text"/>	
1.2	Mowing of Vegetation	Staff A Staff B Staff C Staff D	
1.3	Tree and Brush Trimming		
1.4	Maintenance of Vegetation		
1.5	Removal of Vegetation		



# About the Templates

- How to Create Drop Down Lists



# About the Templates

- To learn more about how to modify the template using drop-down lists, go to the Tips and Tools section of the guidance document.
- Drop-Down Lists may help the crew work more efficiently in worksheets/spreadsheets in Excel because it allows people to pick an item from a list.



[illegible]

# About the Templates

- An equipment maintenance log is a document that records activities that have been performed on an asset or equipment.
- The Equipment Maintenance Log template contains information about scheduled maintenance for all of the road maintenance equipment used by the Tribe.



# How to Use the Maintenance Plan Template

- The basic template will need to be modified to include routes, facilities, assets, major tasks, and sub-tasks for each location.
- The Transportation Director may modified the template annually or at select intervals, or it may be accomplished by the entire maintenance team using the field experience of the team to identify tasks.

# How to Use the Maintenance Plan Template

The graphic below provides an example of how the template can be filled in.

Maintenance Plan Template Headings							Winter	Spring	Summer	Fall
Task	Activity	Tribal Personnel	Other Personnel	Tribal Equipment	Rental or Other Equipment	Materials/Supplies	Dec-Feb	Mar-May	Jun-Aug	Oct-Dec
Ex:	Vegetation Clearing	John Doe	Engineer Contractor	mechanical weed control, deck mowers	In-house	Shovels, tree shears, grapples, fuel	X	X	X	X



# How to Use the Maintenance Plan Template

- The modified template should be reviewed for periodic updates to account for changes in the tribal transportation system, such as condition and/or addition of routes, assets, facilities, tasks and resources.

# How to Use the Maintenance Plan Template

- The template should be developed and used in coordination with the established maintenance standards, policies and procedures of the Tribe and/or other transportation facility owner.
- System conditions and levels of service and available funding must also be considered when developing the template for local use.





# How to Use the Maintenance Plan Template

- The template can be used to anticipate the annual maintenance needs/costs against the actual maintenance budget to determine gaps and funding shortfalls.
  - Preventative and routine maintenance
  - Periodic maintenance
  - Emergency maintenance
  - Equipment (operations and replacement)
  - Maintenance staff training

# How to Use the Equipment Maintenance Log Template

- The log ensures that the Tribe's transportation maintenance team services their machinery within the specified interval to keep them operating efficiently.
- To help make sure that maintenance tasks are done diligently, records in the form of maintenance logs need to be created and updated. Being aware of the current condition of the assets is a step towards improving the overall department performance and ensuring safe working conditions.



# How to Use the Equipment Maintenance Log Template

- The following table is an example of the Equipment Maintenance Log Template. The Main headers provide information about the equipment: equipment name, serial number, location, manufacturer, manufacturer part number, manufacturer contact details, date manufactured, and date in service.

# How to Use the Equipment Maintenance Log Template

- For similar types of equipment, to prevent confusion about which maintenance log refers to which piece of equipment, it is better to keep separate logs. For example, two same-sized excavators from the same manufacturer will differ in serial number and/or location.

## Equipment Maintenance Log

Name of Equipment	Manufacturer's contact details:
Label or ID#:	Date of purchase:
Serial number:	Person responsible for equipment:
Manufacturer:	Date put into service:



- The second part allows entries of maintenance activities.

[illegible]

# How to Use the Equipment Maintenance Log Template

- Details about the maintenance activity are listed: the date when it was performed; and a description of the maintenance activity; the person who performed the activity; the date; and person responsible for validating that the maintenance procedures were performed correctly.



# How to Use the Equipment Maintenance Log Template

- Additionally, the next scheduled maintenance planned date for any required action and other remarks can also be added for reference.



# Any Questions?





# Thank you!

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**Tribal Engagement and  
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