

# Update on Water Resources in the Lahaina Aquifer Sector Area

## Agenda Item B-2

### d. Water Resource Alternatives



October 24, 2023



# Proposed Alternative Water Sources in West Maui

## **Option 1: Expand R1 Use**

Expansion of Recycled Water Use Distribution  
and Reservoir Improvements

## **Option 2: Repurposing Existing Source**

Honokōwai Development Tunnel

## Option 1: Expand R1 Use

### Lahaina Recycled Water Reservoir and Distribution Improvements

#### Benefits

- Increased storage of recycled water for distribution
- Reduced reliance on surface water for non-potable needs
- Reduced groundwater injection of recycled water
- Increased storage of non-potable water for agriculture and fire fighting

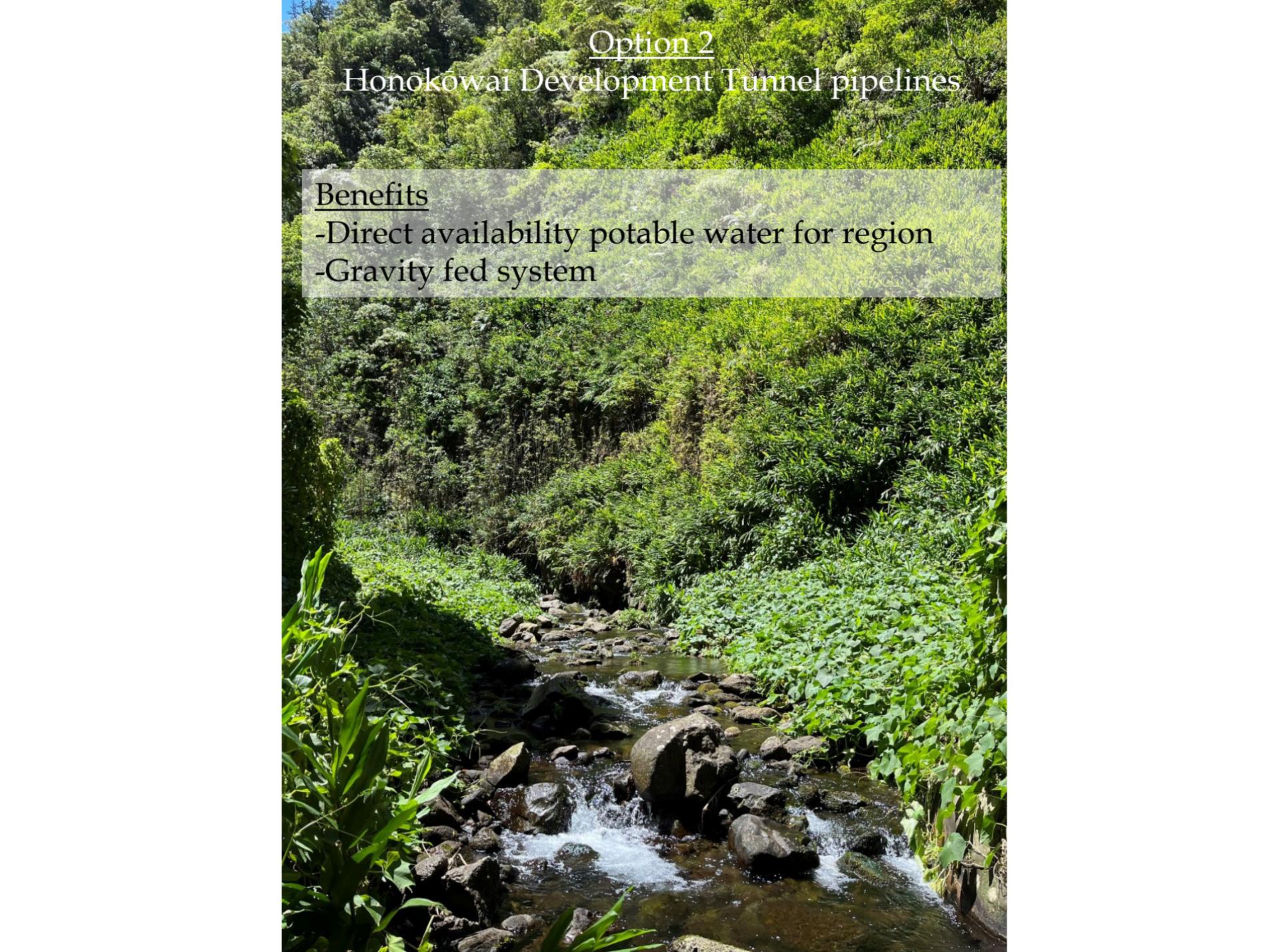
## Option 1: Expand R1 Use

### Pros

- Old pipelines/ ditches/ reservoirs already in place
- Gravity fed distribution system (once water is pumped to Field 140 reservoir)
- Increased storage of R1 water
- Ideal elevation/location to support fire fighting and agriculture
- Instream Flow Standard does not have to be modified
- County can charge for non-potable use to support maintenance
- Repurpose decommissioned Wahikuli Reservoir

### Cons

- Need to purchase Field 140 Reservoir
- Honokōhau Ditch crosses some privately-owned land
- Multiple gulches to cross adds cost/engineering (although accessible)



Option 2  
Honokōwai Development Tunnel pipelines

Benefits

- Direct availability potable water for region
- Gravity fed system

## **Option 2:** Honokōwai Development Tunnel Improvements

### **Pros**

- Groundwater source already developed
- Water can flow by gravity to County System (reduced costs)
- Tunnel 20B on State Land (0.5-0.7 mgd)
- Instream Flow Standard does not have to be modified
- Can meet potable needs for DHHL in new developments

### **Cons**

- Pipeline would need to cross some privately-owned land
- Access is challenging to run pipeline through tunnel into gulch