



— BUREAU OF —  
RECLAMATION

# Irrigation Infrastructure O&M in the 21<sup>st</sup> Century

Idaho Water Users Association  
February 4, 2021

# North Platte Tunnel - Nebraska

- July 17, 2019
- Took 6 minutes from the tunnel collapsing until water backed-up and breached the canal
- Stopped Irrigation water delivery to 107,000 acres for remainder of season
- Approximately \$89 million in crop loss



**Main Gering / Ft. Laramie Canal**

# Truckee Canal - Nevada

- 4:15 am January 5, 2008
- Approximately 580 homes impacted
- Flooded area amplified due to housing development's road / culvert structures reducing capacity of a natural drainage channel
- 2016 – settlement for \$18.2 million



2008 – Truckee Canal – Fernley, Nevada

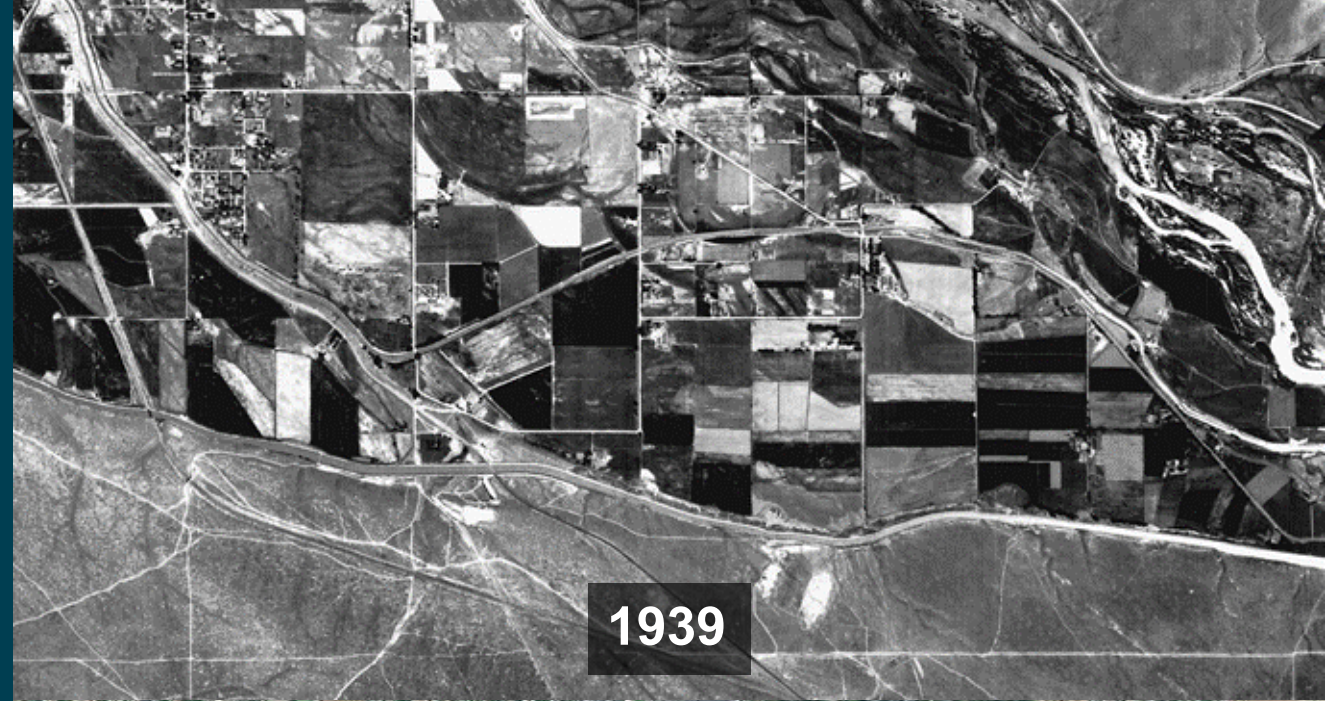
# Issue

Rapid growth presents additional complexities in relation to the New York Canal and other water delivery infrastructure

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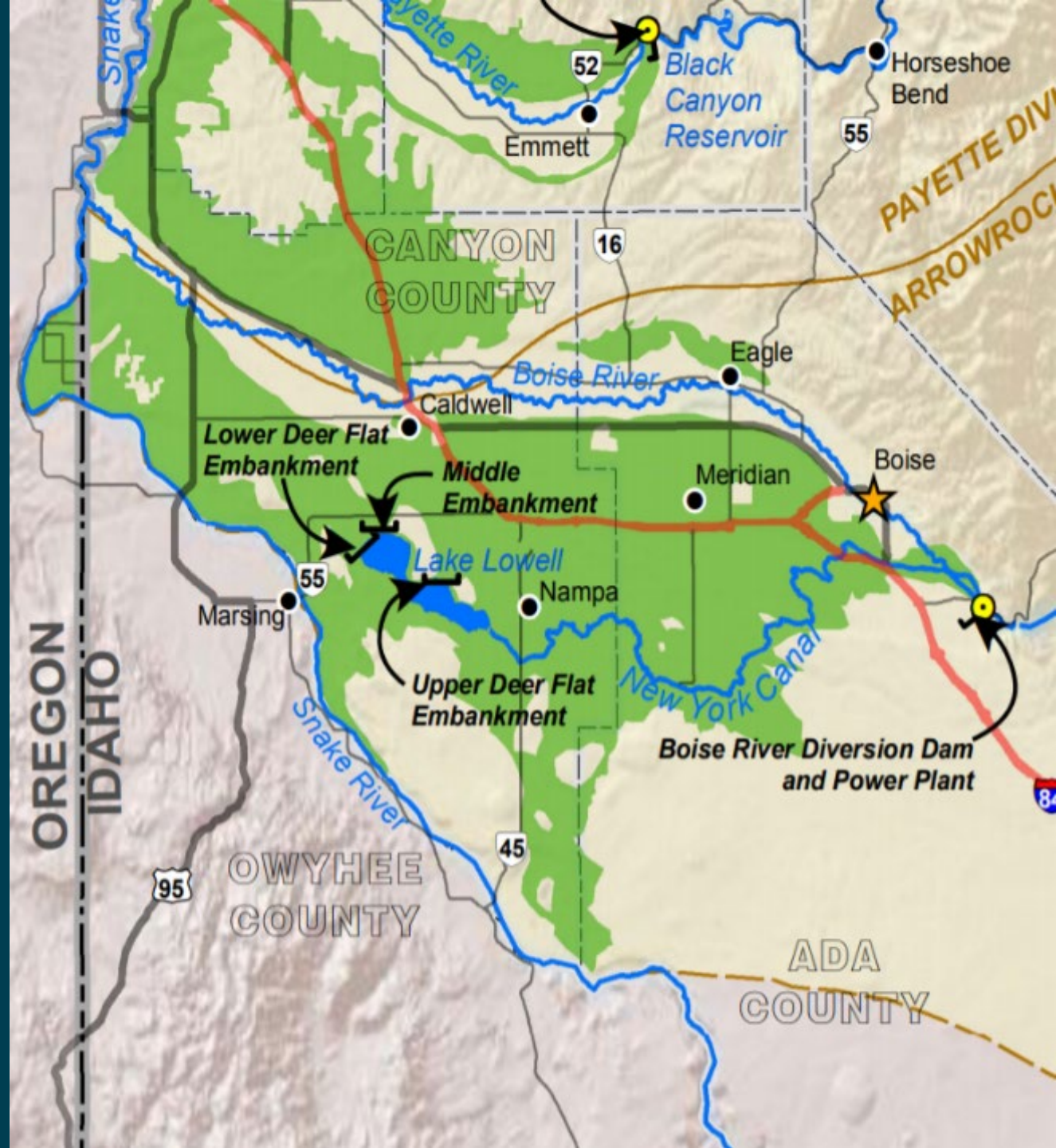
# Objective

- To provide an understanding of the issue
- To communicate Reclamation and Boise Project Board of Control (BPBC) current programs and actions
- To communicate how we want to enhance these efforts for the future



# Background

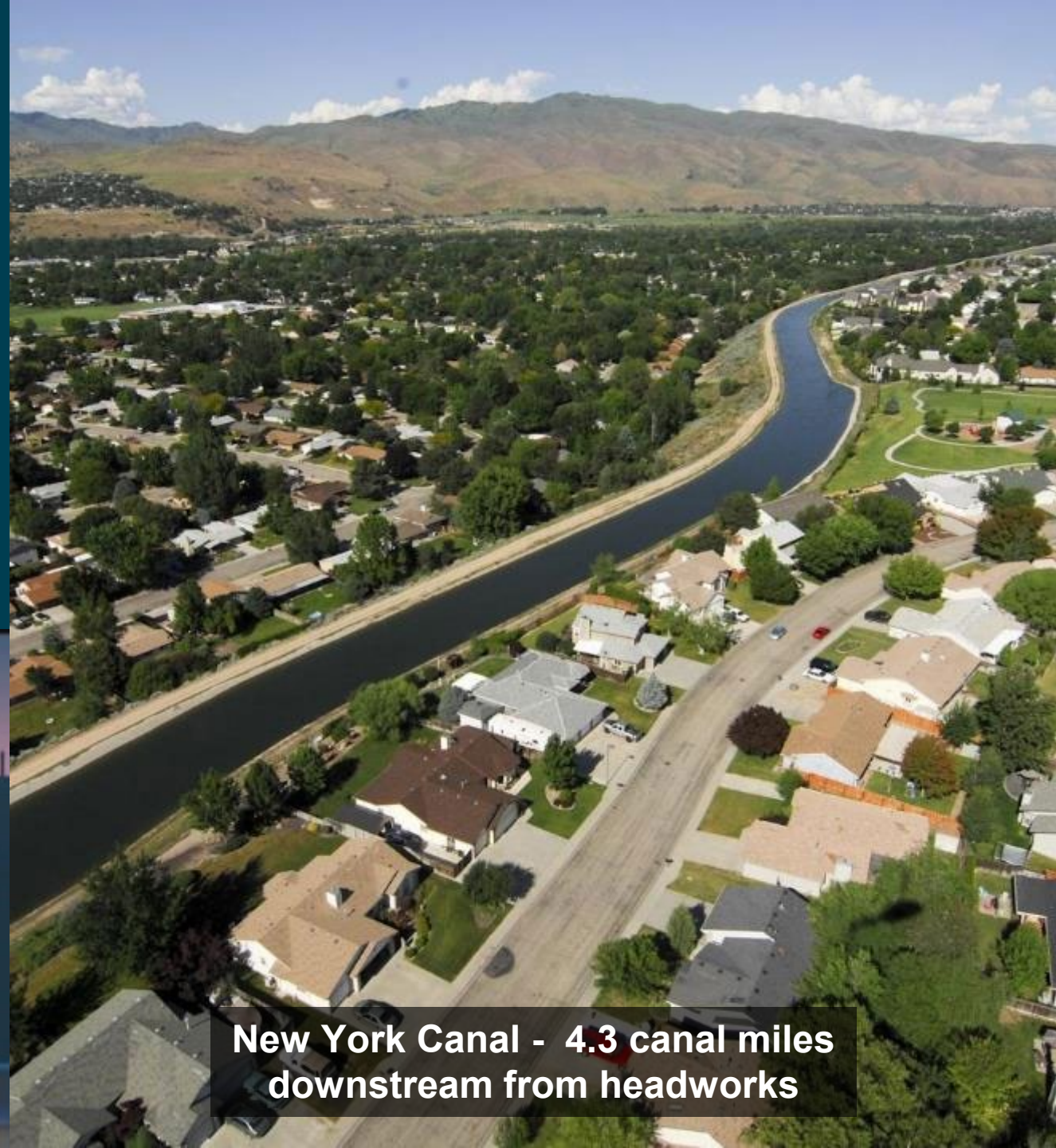
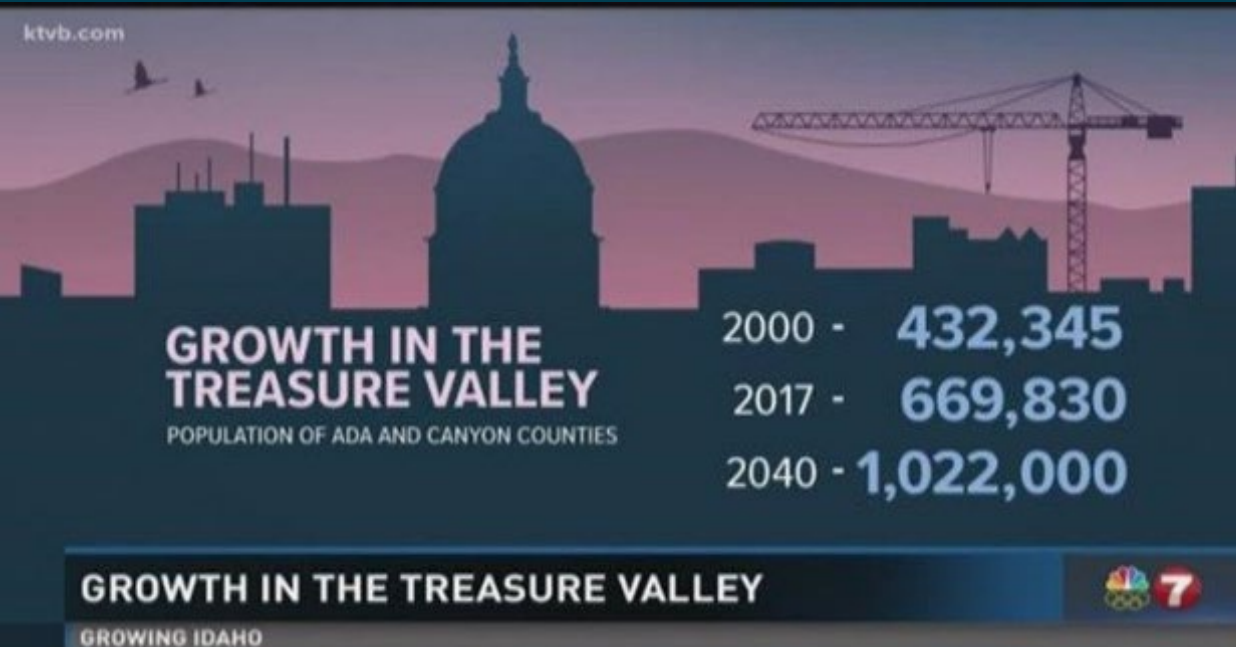
- Canal was built in early 1900s on acquired easements and 1890 Canal Act reserved rights of way
- In 1926, Reclamation transferred the operations and maintenance (O&M) responsibility to the BPBC
- Overall length of the canal is 41 miles with 23 miles in urbanizing areas
- Capacity is 2,450 cubic feet per second (cfs) - often more than the Boise River
- Canal serves 165,000 irrigated acres, delivering water to 33,000 agricultural and residential individual water user accounts
- Irrigated agriculture provides nearly \$600M in annual economic benefits including seed crops shipped worldwide



# Growth and Risk

Rapid growth in the Treasure Valley means...

- More people are living and working near the canal
- Agricultural to urban conversion continues to occur in close proximity to the canal
- Development is increasing the number of issues involving the canal



New York Canal - 4.3 canal miles  
downstream from headworks

**Urbanization can threaten the structural integrity of man-made structures and increase the risk to people and property**



# Reclamation and BPBC Efforts

- Frequent and detailed inspections of canal reaches in urbanized areas
- Adapting Reclamation's dam safety risk analysis methodology to urbanized canals
- Applying modern lining and monitoring practices
- Actively engaging with property owners, municipalities and developers to minimize impacts
- Currently developing a "Living with Canals" public outreach initiative





# Preventative & Defensive Actions to Address Encroachment

## Preventative

Education – BPBC works with people to educate on the importance of protecting easements

BPBC monitors the Canal for activities with potential serious long-term consequences

Reclamation or BPBC will take action to address acts which pose a risk to people or property

## Defensive

Property owners may file legal claims to:

- Validate or protect encroachments
- Remedy perceived impact to their property
- Seek damages following a canal related incident



**Garden boxes terraced into canal embankment.**



....BPBC