

Oklahoma's Innovative Solutions to Funding Dam Safety Projects

National Dam Safety Program Technical Seminar | Natalie Orbesen, EI, CPESC-IT, CFM, Dam Safety Engineer



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Overview

Oklahoma Water Resources Board (OWRB)
Dam Safety Program

Federal Funding Programs

State Funding Programs

Key Takeaways

Oklahoma Dam Statistics

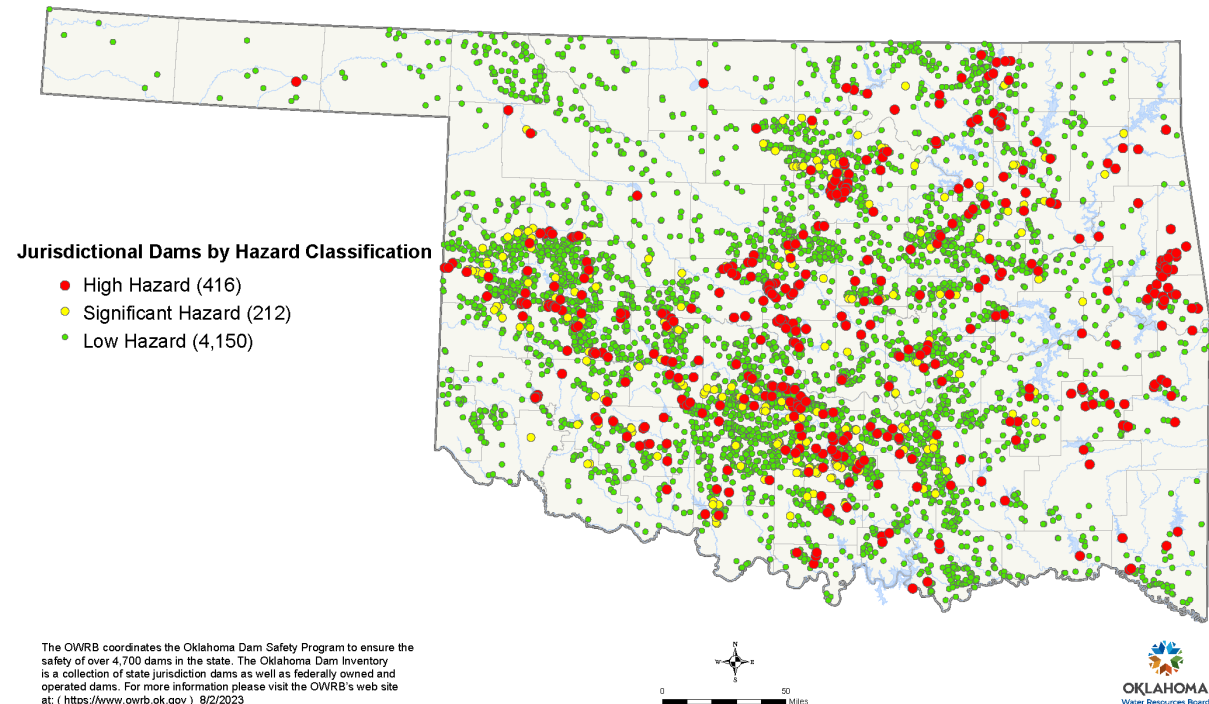
- 4,778 State regulated dams
- 2,089 NRCS dams
- 62 years (average age)
- 2,360 Privately owned
- 219 Local Gov. & utilities owned
 - 25 High hazard potential dams in poor & unsatisfactory



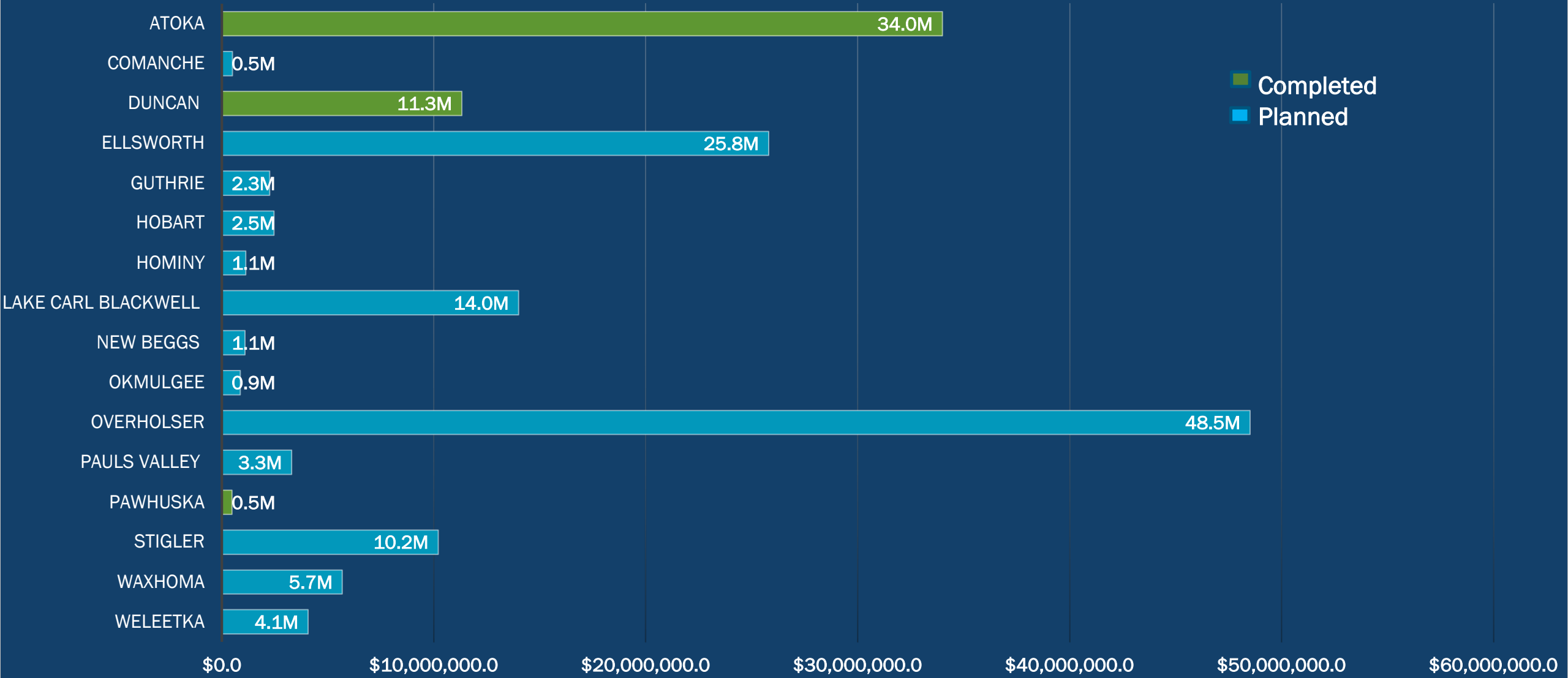
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Oklahoma Dam Inventory

(Jurisdictional Dams by Hazard Classification)



Estimated Oklahoma Dam Project Costs



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**That's over
\$100 Million
in Dam Rehabilitation
Projects!**



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Dam Rehabilitation Funding Sources



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Federal Funding Sources

Laws

- American Rescue Plan Act (ARPA)
- Infrastructure Investment in Jobs Act (IIJA)/Bipartisan Infrastructure Law (BIL)
- Inflation Reduction Act (IRA)

Agencies

- Federal Emergency Management Agency (FEMA)
- United States Department of Agriculture (USDA)
- Indian Health Services (IHS)
- Environmental Protection Agency (EPA)



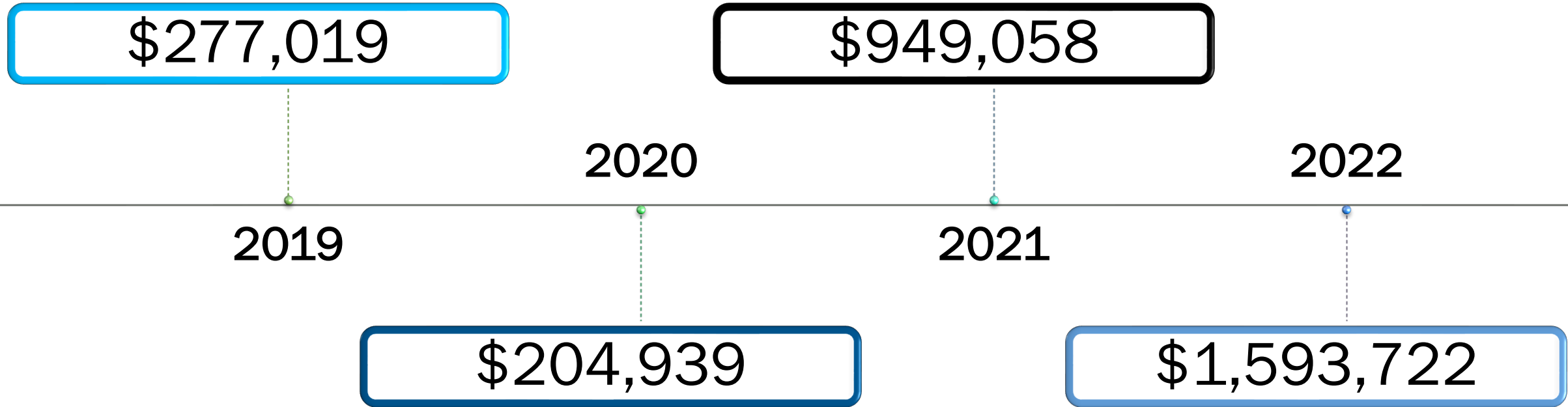
Rehabilitation of High Hazard Potential Dams (HHPD) Grant Program

IIJA Appropriation: \$585 Million



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Oklahoma HHPD Grant Awards



Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act

IIJA Appropriation: \$500 Million



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Building Resilient Infrastructure and Communities (BRIC)

IIJA Appropriation: \$1 Billion



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USDA Emergency Community Water Assistance Grant

Maximum Award Amount: \$1 Million



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Lake Waxhoma Dam

Project Funding Sources

- \$100 K OWRB Emergency Grant
- \$1 M USDA Emergency Community Water Assistance Grant
- \$1 M Osage Nation
- \$1 . 6 M EPA/Congressional
- \$2 M ARPA Grant



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Sanitation Facilities Construction Projects

IIJA Appropriation: \$3.5 Billion



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EPA Drinking Water State Revolving Fund (DWSRF)

IIJA Appropriation: \$11.7 Billion



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EPA Clean Water State Revolving Fund (CWSRF)

IIJA Appropriation: \$11.7 Billion



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Atoka Lake Dam

Project Funding Sources

- **\$34 M** Clean Water State
Revolving Fund Loan



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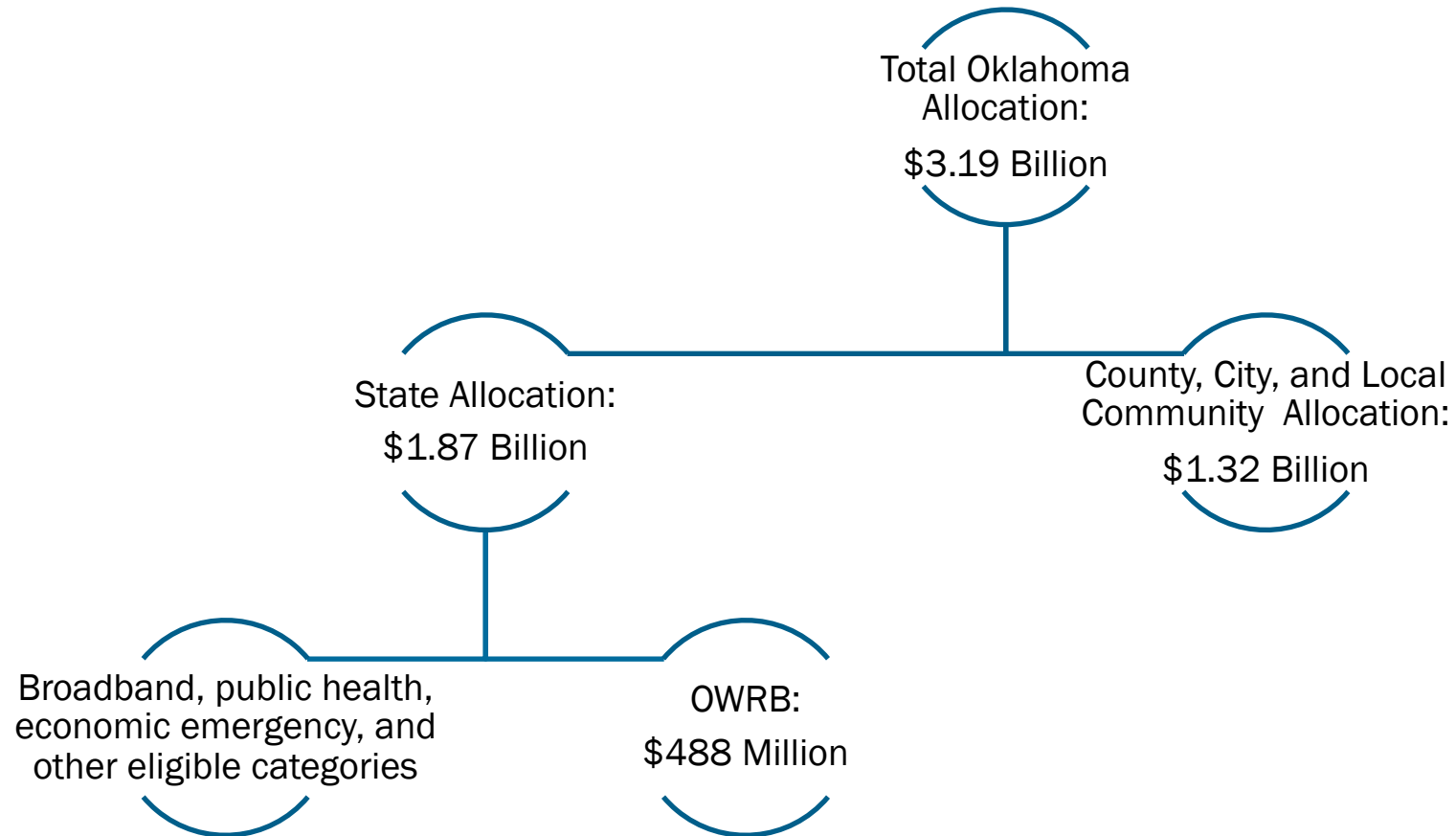


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American Rescue Plan Act (ARPA)



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1. OWRB ARAP Allocation

\$11 M

Dam rehabilitation

\$ 44 M

Water/wastewater

- Population > 7,000
- > 2,300 non-pasture taps

\$55 M

Water/wastewater

- Population \leq 7,000
- \leq 2,300 non-pasture taps

\$57 M

Tribal Projects

\$321 M

Statewide targeted investment projects



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2. OWRB ARAP Allocation

\$11 M

Dam rehabilitation

\$ 44 M

Water/wastewater

- Population > 7,000
- > 2,300 non-pasture taps

\$55 M

Water/wastewater

- Population \leq 7,000
- \leq 2,300 non-pasture taps

\$57 M

Tribal Projects

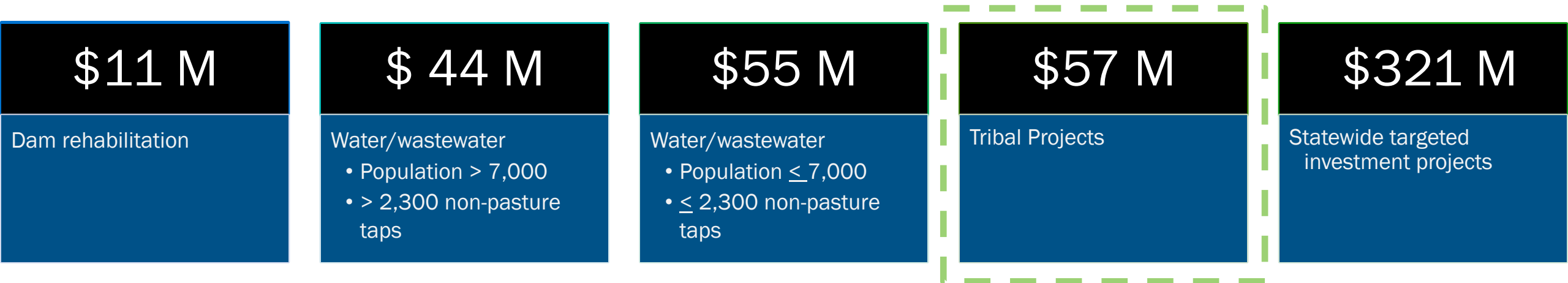
\$321 M

Statewide targeted investment projects



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3. OWRB ARAP Allocation



4. OWRB ARAP Allocation

\$11 M

Dam rehabilitation

\$ 44 M

Water/wastewater

- Population > 7,000
- > 2,300 non-pasture taps

\$55 M

Water/wastewater

- Population \leq 7,000
- \leq 2,300 non-pasture taps

\$57 M

Tribal Projects

\$321 M

Statewide targeted investment projects



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Lake Ellsworth Dam

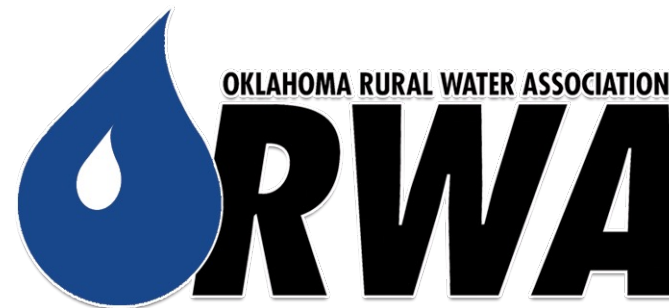
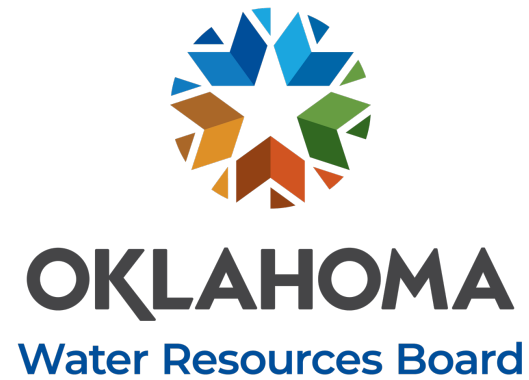
Project Funding Sources

- **\$1 M** Dam Rehabilitation
ARPA Grant
- **\$10 M** Targeted Investment
ARPA Grant
- **\$1 M** HHPD Grant
- **\$14 M** Local Funds



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State Funding Sources



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OWRB Financial Assistance Loan Program



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Hobart Dam

Project Funding Sources

- **\$1.5 M** Financial Assistance Loan
- **\$1 M** Dam Rehabilitation ARPA Grant



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Water Resources Board

OWRB Emergency Grant Program

Maximum Award Amount: \$100,000



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OKLAHOMA

Water Resources Board

OWRB Rural Economic Action Plan Grant Program (REAP)

Maximum Award Amount: \$150,000



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Lake Pawhuska Dam

Project Funding Sources

- **\$100 K** OWRB
Emergency Grant
- **\$190 K** CWSRF Principal
forgiveness loan
- **\$190 K** Local funds



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Maximum Award Amount: \$150,000



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New Beggs Dam

Project Funding Sources

- \$100 K RIG
- \$1 M Dam Rehabilitation ARPA Grant



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Keys to Success

Dam Owner

- Motivated dam owners who strive to find funding
- Comply with federal requirements and time commitments
- Be prepared for when funding becomes available

State Program

- Patient, adaptable, and creative staff
- Regular and early communication with dam owners
- Established relationship with state, tribal and federal partners



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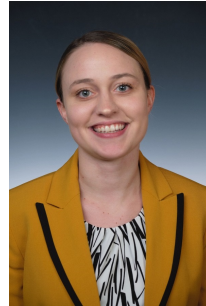
Lessons Learned

- Lack of means or interest for funding programs
- Requirements beyond control/jurisdiction
- Early studies could reveal unknown issues
- Be proactive and track the rules/requirements changes constantly
- Prepare for review time delays



Thank You!

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- Alicia Ferris - USDA



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