

# Existing Development Stormwater: Falls & Jordan

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John Huisman, Ellie Rauh – DWR

Kingston Armstrong - NCSU

# Fall Existing Development Options

- Individual Local Program (Option #1)
  - Local Government plan to implement Stage I reductions
  - SNAP and lbs. of nutrients tracking
- Joint Compliance Approach - Investment (Option #2)
  - Interim Alternative Implementation Approach (IAIA)
  - All 13 UNRBA members
  - Investment based tracking

# Option 1: Individual Local Program

- Calculate Stage I load reduction needs aka “Jurisdictional Load”
- Measure opportunity assessment
  - Evaluation of opportunity & load reduction potential of practices
- Implementation plan
  - Types of activities and lands affected
  - Prioritization of practices; magnitude and duration of reductions expected
- Annual Reporting Plan to Document Implementation

# Individual Local Program: Roxboro

- Stage I load reduction needs
  - SNAP Tool method; modest load reductions needs (5.38 lbs/N/year 3.87 lbs/P/year)
  - Development during 2006-2012 limited by economic recession
- Measures opportunity assessment
  - Original 2013 inventory identified limited options; reductions needs also low
  - Assessed use of street sweeping and other measures
- Implementation plan for offsetting loads
  - Street sweeping - primary practice, started in 2012
  - Collection system improvements & nutrient offset payments - alternative options
  - Existing stormwater fee used as funding mechanism
- Annual Reporting
  - Implementation reports submitted annually on October 31<sup>st</sup>

# Option 2: Alternative Investment Program

- Voluntary Implementation – Parties Merge Reductions, Meet Collectively
  - Merge municipalities w/ counties and wastewater w/ existing development
- UNRBA: **Interim Alternative Implementation Approach (IAIA)**
  - Combines wastewater over-reductions w/ existing development
  - Ensures projects implemented in Stage I, deemphasizes pounds-counting
  - Provides additional flexibility in types practices implemented
  - Affected parties commit to fixed amount of \$ invested each year on projects
- Annual Individual & Joint Summary Reports to DWR
- Process for Terminating Participation in Joint Approach
  - Advance written notice to DWR; local program in place

# Alternative Investment Program

- Joint Compliance
- Developed through collaboration – UNRBA, DWR, NGOs
  - Addresses Required Elements of Model Program for Joint Compliance
- IAIA Guiding Principals
  - Lays foundation for innovative management approaches
  - Implements water quality improvement projects now while re-examination ongoing
  - Expands list of allowable practices - adds flexibility
  - Simplifies approach; committed annual funding levels
  - Demonstrates continued commitment to cost-effective and equitable management of lake
- Program Document Contents
  - Investment commitments for each participant
  - Identifies eligible projects
  - Describes process for additional practices/projects to be approved
  - Outlines reporting procedures; provides general implementation guidance

# Falls ED Investments

- Annual Investment levels determined cooperatively by participating jurisdictions using UNRBA fee structure that weights area in watershed, water withdrawal and other factors distributed equally among each member

UNRBA Member	Annual Funding Level	UNRBA Member	Annual Funding Level
Town of Butner	\$23,393	Town of Hillsborough	\$34,221
City of Creedmoor	\$16,926	Orange County	\$161,943
City of Durham	\$337,587	Person County	\$114,394
Durham County	\$133,300	City of Raleigh	\$466,081
Franklin County	\$19,058	Wake County	\$88,968
Granville County	\$100,453	Town of Wake Forest	\$13,692
Town of Stem	\$11,605	<b>Combined Total</b>	<b>\$1.5 million</b>

x

# Eligible Activities for Investment

- Eligible activities for annual (\$) commitments
  - All state-approved practices w/ established nutrient credits (SCMs & retrofits)
  - Green Infrastructure & BMPs that include water quality & quantity benefits
  - Stream and riparian buffer restoration
  - Programmatic Measures - fertilizer education, pet waste stations, onsite maintenance
  - Infrastructure improvements - Repair leaking infrastructure, Reduction of SSOs
  - Illicit discharge detection and elimination
  - Land conservation in high priority areas
  - Floodplain restoration & reconnection
  - Operation & Maintenance of practices to ensure long-term functionality
  - Hydrilla removal
  - Greenways & parks with documented water quality benefits
- Additional activities allowed pending DEQ/DWR approval



# IAIA Administration & Annual Reporting

- UNRBA Compliance Group Committee
  - Decision making body for implementation of UNRBA Joint Compliance Approach
  - Responsible for tracking & submitting joint combined annual progress report to DWR
  - Provide guidance to IAIA participants
- Annual Reports
  - LG's submit individual implementation reports to DWR annually September 30<sup>th</sup>
  - Compliance Group Committee submits joint summary report by November 30<sup>th</sup>
- Initial duration of IAIA Program July 1, 2021 – June 30, 2026
  - May be extended if Falls Rules not readopted by 2026

# Progress of Falls ED approval and implementation

- **July 2021:** LG's submit local or joint programs & begin implementation
- **September 2022:** Division provides local program recommendations to EMC
- **December 2022:** Implementation of EMC approved programs begins
- **December 2024:** EMC to begin Falls rules readoption
- **2026-2028:** Anticipated end to Stage I Implementation
  - Overall, ED IAIA program has been well received

- 2nd Half

# DWR Discussions on Jordan ED

## Load reduction requirements:

- How do we determine **proper load reduction requirements** considering metric of compliance is in dollars and the proportion of ED impact on water quality in the watershed
- Should we use NLCD load calculation estimates for everyone then say what x percent of reductions needed as benchmark
- No point sources included for Jordan ED

## Eligible activities:

- There will be ability to **expand eligible activities**
- What reporting provides **data on effectiveness of practice/program**; Still require tracking of **load reductions from SCMs** or others as feasible and report to DWR; what reporting provides data on effectiveness of practice
- How can we include load prevention practices like forest preservation but **incentivize load reduction practices**

# DWR Discussions on Jordan ED

## Compliance:

- Currently in Falls, if a jurisdiction is not in compliance their participation in **joint compliance is terminated** and jurisdiction starts standard local program
  - Instead of automatic termination, what are other compliance/enforcement options

## Investments:

- Can DWR have rule language that **requires investments**
- Can DWR provide requirements for investment **allocations** in rule language

## Administration/Org:

- Should **compliance and/or investments be outlined in rule, agreements, MOUs**
  - Does JLOW have the capacity to be a compliance group committee, should JLOW have the same role as UNRBA, must a jurisdiction be a member to participate in IAIA/Investment Option

# Initial Research – US Review

- Initial research focused on review of watershed partnerships for water quality goals
- Search of examples of investment-based programs
- Next step is review of ED related programs in Ohio, Michigan, Oregon, Maryland, Virginia, Florida

Categories	Description
<b>Project Name and main link</b>	Name of project example
<b>Project location</b>	Location of example project
<b>General Project Goal</b>	Project goals/priorities (i.e stormwater, drinking water, flood protection)
<b>Main Actors</b>	The groups that are primarily involved in coalition, funding, and/or project implementation
<b>Governing Body</b>	Is a governing agency involved and how - A group that can enforce laws
<b>Compliance mechanisms</b>	Regulations created for the program or regulations used to make the program enforceable, other formal or semi-informal rules (i.e. coalition by-laws)
<b>Funding determination</b>	How member funding allocations determined, rate structure
<b>Type of funding mechanism</b>	Is it tax based, types of grants, other
<b>Funding Info</b>	Total amount funded, number of investors, years funded
<b>Project types approved</b>	Were project types approved by governing agency
<b>Project types</b>	What is the project type used (i.e. land conservation, well head protection, retrofits)
<b>Record keeping</b>	Any record keeping tools identified (if time - are they monitoring for effectiveness, such as water quality indicators)

Project Name and main link	Gov body or compliance requirements
Denver Water-US Forest Service Watershed Protection Partnership (aka Forest to Faucets)	No
Delaware River Common Waters Fund	No
Portland Water District Project	No, Voluntary, PWD Watershed Land Preservation Policy outlines principles that members follow
Upper Neuse Clean Water Initiative	Yes, Raleigh City Council
San Francisco Public Utilities Commission Watershed and Environmental Improvement Program	No, Agreement
Pueblo Board of Water Works–U.S. Forest Service Watershed Protection Partnership	No, MOU
Flagstaff Watershed Protection Project	Yes, City of Flagstaff, issuing bonds
Rio Grande Water Fund	Yes, City of Flagstaff, issuing bonds
Santa Fe Municipal Watershed Investment Program	Yes, Santa Fe city council, Watershed Management Plan
Colorado–Big Thompson Headwaters Partnership (Northern Water)	Yes
Colorado Springs Utilities–U.S. Forest Service Watershed Protection Partnership	No
New Colorado Partnership: Southeastern Water Conservancy District	No, District court approves process for new members and member meets NEPA requirements
Aurora Water–U.S. Forest Service Watershed Protection Partnership	No



# Portland Water District (PWD) Project

- Watersheds Impacted: Portland and Crooked River
- Project Goals:
  - Development Threats
  - Water Quality Deterioration
  - Address Threat of Losing EPA Filtration Waiver
- Projects: Lakescaping, local land trusts/conservation aid, land acquisition
- Governing Body Involved: No, it is voluntary to join

# Portland Water District (PWD) Project

- Compliance Mechanism: PWD Watershed Land Preservation Policy
  - Prioritizes how to protect watershed lands based on development status and natural characteristics
  - Prioritizes which land purchases to make based on available financing
  - Funding Allocation/Rate Structure:
  - PWD completes a wire after closing on a land purchase, and the land trusts pull together the rest of the funding from multiple sources (which varies from transaction to transaction)
- Funding allocations are case by case and needs based.
  - PWD can provide up to 25% of the conservation costs, through the Land Conservation Program,

# San Francisco Public Utilities Commission (SFPUC) Watershed and Environmental Improvement Program

- Watersheds Impacted: SF Bay Area, Tuolumne River (Yosemite), and Alameda Creek
- Project Goals:
  - Development Threats
  - Wildfire and Flooding Risks
  - Declining Water Supply
  - Ecological Threats
- Projects: Land Acquisition, habitat protection, restoration
- Governing Body Involved: San Francisco Department of the Environment (no enforcement)
- Compliance Mechanism: Rangeland Monitoring Program
  - Ensures that SFPUC lands are in compliance with land use regulations/guidelines
- Funding Allocation/Rate Structure:
  - Operating budget funds are distributed based on consumption and threat of deterioration.

# "Colorado–Big Thompson Headwaters Partnership (Northern Water)"

- Watersheds Impacted: Upper Colorado River, Big Thompson River, and Cache la Poudre River
- Project Goals:
  - Wildfire and Flooding Risks
  - Declining Water Quality
  - Ecological Threats
- Projects: Land Acquisition, habitat protection, restoration, etc.
- Governing Body Involved: USDA and U.S. Department of the Interior are Indirectly partners through the Western Watershed Enhancement Initiative
- Compliance Mechanism: Unsure (for now)
- Funding Allocation/Rate Structure:
  - U.S. Forest Service funds 50% of the budget for all projects, other funding sources are split up through an operating budget, or land grants used on private lands from the Colorado State Forest Service

# Discussion questions: NSAB

- What is an equitable funding allocation requirement for Jordan ED investment program?
- Do we need to provide nutrient reduction requirements for participating members as a whole or individually to provide measurable and attainable goals?
- How can we include load prevention practice in eligible activities but incentives more load reduction practices?



# References

Ozment, S., Gartner, T., Huber-Stearns, H., DiFrancesco, K., Lichten, N., & Tognetti, S. (2018). Protecting Drinking Water at the Source. World Resources Institute.

Portland Water District. (2007, amended 2013). Policy for Watershed Land Conservation Outside the Two-Mile Limit. Retrieved from <https://www.pwd.org>