

Path Forward Committee Meeting
10:40 AM on August 4, 2020
Remote Access Only (see next slides)



Remote Access Options

Equipment Type	Access Information	Notes
Computers with microphones and speakers	Join Microsoft Teams Meeting Please mute your microphone unless you want to provide input.	Press control and click on this link to bring up Microsoft Teams through the internet. You can view the screen share and communicate through your computer's speakers and microphone
Computers without audio capabilities, or audio that is not working	Join Microsoft Teams Meeting (888) 404-2493 Passcode: 371 817 961# Please mute your phone unless you want to provide input.	Follow instructions above Turn down your computer speakers, mute your computer microphone, and dial the toll-free number through your phone and enter the passcode
Phone only	(888) 404-2493 Passcode: 371 817 961# Please mute your phone unless you want to provide input.	Dial the toll-free number and enter the passcode

Remote Access Guidelines

- This meeting will open 10 minutes prior to the first meeting start time (e.g., MRSW) to allow users to **test equipment** and ensure communication methods are working
- If you dial in through your phone, mute your microphone and turn down your speakers to **avoid feedback**
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Agenda

- Opening comments
- Status of the Interim Alternative Implementation Approach
- DWR 2020 Integrated Report and 303(d) Assessments
- Summary of UNRBA comments on the EPA Federal Register Notice May 22, 2020 - Draft Ambient Water Quality Criteria Recommendations for Lakes and Reservoirs
- Modeling and Regulatory Support Status
- Other items
- Closing comments

**Status of the UNRBA Stage I
Existing Development (ED)
Interim Alternative
Implementation Approach (IAIA)**

IAIA Program Status

- Draft Program Document has been updated based on input from the Legal Group
 - Distributed to PFC on July 17th
- Developed summary of core principles to discuss with local leaders (also distributed July 17th)
- General consensus to modify the UNRBA Bylaws to provide administrative vehicle
- Discussions about participation will determine which members contribute to legal agreements and modifications to Bylaws
 - UNRBA Board would need to approve modifications to Bylaws, but text to be drafted by IAIA members
 - Develop template contracts for agreements with non-member organizations

Key, Core Principles to Develop Administrative Framework

- The IAIA is a group effort, but compliance is assessed individually for each jurisdiction
 - Participants must be members of the UNRBA, but UNRBA members are not required to participate
 - Only formal participants in the IAIA can vote on IAIA-related decisions
 - Each jurisdiction must document investments and eligibility of expenditures
 - Point source credits belong to the jurisdiction that owns the utility that created them, unless the credits are sold or leased to another jurisdiction by the generating jurisdiction

Key, Core Principles to Develop Administrative Framework

- Participation requires a 5-year investment commitment from each jurisdiction to reduce administrative burden
 - Commitments are assigned annually based on \$100,000 per year from Granville County using the UNRBA membership due structure
 - Jurisdictions are responsible for their assigned annual commitment with excess to roll over
 - Each jurisdiction can choose from several options to expend funds (e.g., individual projects, joint projects, funding eligible projects through organizations like school systems and county health departments)
 - Jurisdictions can change which funding options they utilize from year to year
 - Each jurisdiction has the option to withdraw at the end of the fiscal year

Key, Core Principles to Develop Administrative Framework

- Commitments can either be expended individually at the local level or as part of a joint project
- Individual jurisdictions decide how their funds are spent
- Jurisdictions may be more specific in their budgets or board directives about how funds are spent, and the IAIA Program Document is not prescriptive but rather flexible

Key, Core Principles to Develop Administrative Framework

- If a participant drops out during a year, the jurisdiction
 - Must commit the full investment for the year
 - Must notify DWR and other participants
 - Must comply with the rules under an individual local program under consultation with DWR and without implementation lag
- If a participant drops out during a year, the group
 - Is not out of compliance
 - The total investment level changes (i.e., is reduced by the jurisdiction amount that left the group)
- The IAIA agreement will address what happens if a jurisdiction backs out of a particular project

Development Schedule for UNRBA IAIA Program Implemented under the Falls Lake existing rules for a potential start date in July 2021.

July 2020:

- DWR provides a revised draft Model Program for UNRBA review
- PFC discuss with local decision makers the likelihood of participation
- PFC review the DWR Model Program

Aug 2020:

- PFC discuss preliminary input from local leaders on participation (Aug 4th)
- PFC review DWR Model Program and provide comment to DWR
- PFC finalizes IAIA Program Document for Board review
- UNRBA prepare for information update to the EMC Water Quality Committee

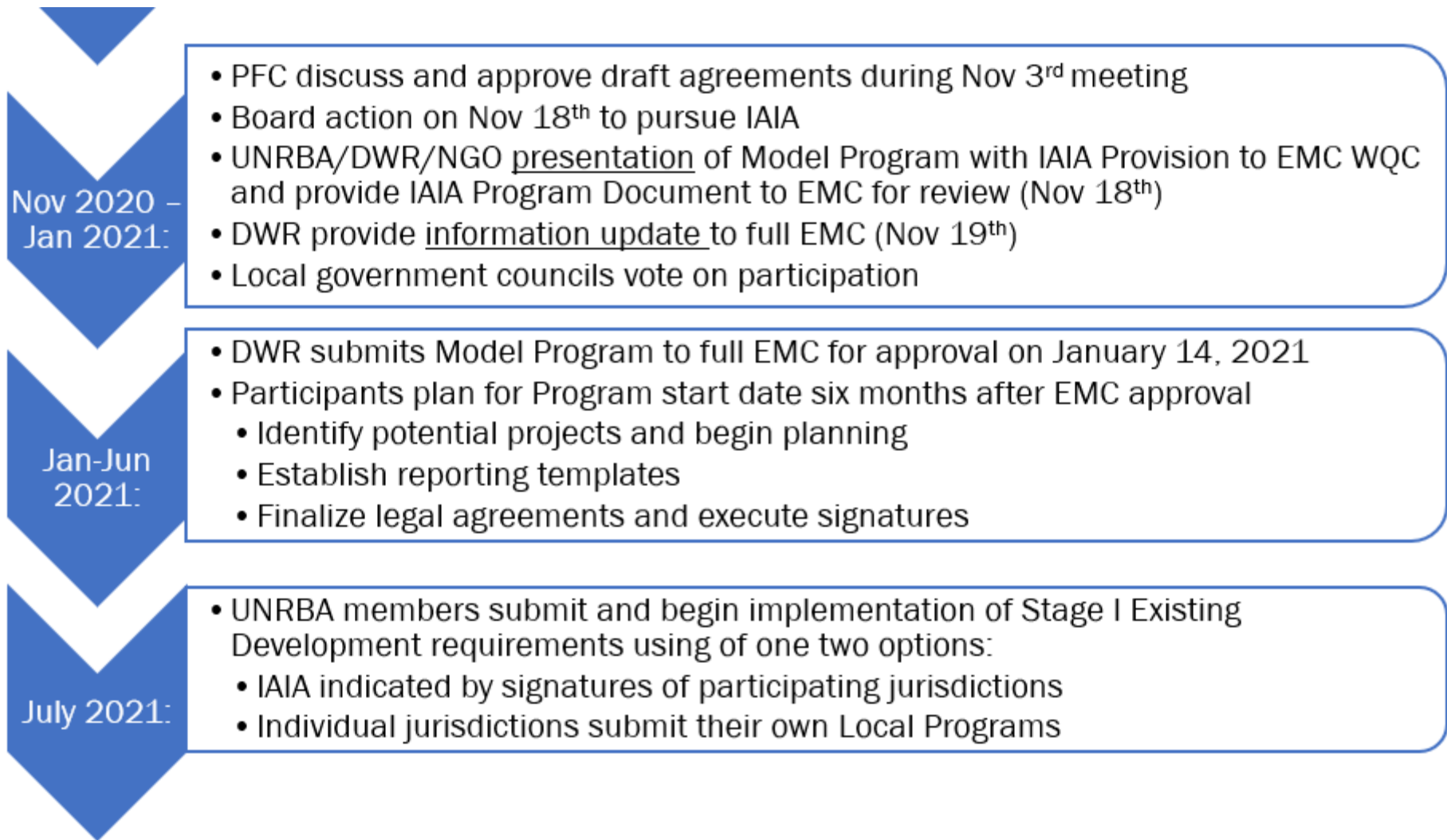
Sep 2020:

- DWR finalizes draft Model Program
- PFC discuss progress on decision making at local level (Sep 1st)
- DWR/UNRBA provide information update to EMC WQC (Sep 9th)
- UNRBA Board meeting (Sep 16th): present IAIA Program
 - Vote on local participation (pending finalization of documents)
 - Authorize legal representatives of likely participants to develop agreements

Sep-Oct
2020:

- Local governments brief local councils and decision makers on IAIA Status
- UNRBA/DWR/NGO prepare for presentation to EMC WQC
- Legal representatives of likely participants develop agreements
- PFC representatives of likely participants review draft agreements

Development Schedule for UNRBA IAIA Program Implemented under the Falls Lake existing rules for a potential start date of July 1, 2021.



Review of IAIA Status – Ongoing Actions

- DWR scheduled to provide draft Model Program for review by UNRBA
- Local governments reporting on participation in the IAIA Program
 - Preliminary feedback August 4th (PFC meeting)
 - Intentions discussed September 1st (PFC meeting)
 - Intentions formalized September 16th (Board meeting)
- Legal representatives of likely participants to work toward modification of UNRBA Bylaws and development of agreements to formalize participation

Key Objective for today's meeting is PFC members report on status of local discussions and participation in the IAIA Program.

DWR 2020 Water Quality Assessments, Integrated Report, and 303(d) list

The DWR draft Integrated Water Quality Assessment Report and the 303(d) list for 2020 were previously anticipated for June 2020.

This target date has been pushed back to probably late September 2020 or perhaps even later.

Summary of the UNRBA Comments on the EPA Draft Ambient Water Quality Criteria Recommendations for Lakes and Reservoirs of the Conterminous United States: Information Supporting the Development of Numeric Nutrient Criteria

EPA Water Quality Criteria for Lakes and Reservoirs

Review Basics

- EPA developed stressor-response models for three risk metrics: [Zooplankton/Phytoplankton](#), [Deepwater D.O.](#), and [Microcystins](#).
- The models yield numeric criteria for chlorophyll-a
- EPA then developed models to translate each of the different Chlorophyll-a criteria into numeric recommended TN and TP criteria.
- Different risk metrics are identified for each designated use. Criteria would need to protect the most sensitive use.
- Thus, the most stringent numeric nutrient criteria is selected.

EPA Water Quality Criteria for Lakes and Reservoirs

Review Basics -endpoints and risk metrics

- **For Recreational Use**

8 µg/L of microcystin for adverse effects on children from incidental ingestion of water during recreation.

- **For Finished Drinking Water use**

0.3 µg/L of microcystins for adverse effects on children resulting from oral exposure to drinking water.

States can evaluate the treatment process and add safety factors to establish ambient concentration criteria.

- **For Aquatic Life Use**

The relationship between zooplankton and phytoplankton biomass. The premise - phytoplankton biomass can increase at rates that exceed the capacity of zooplankton to consume the phytoplankton when excess nutrients are available.

Comments Summary

EPA Draft Criteria for Lakes and Reservoirs

- **Time Extension Requests:**
 - NJ, CO, MO, WI, UT, KY, NEIWPCC,
 - ACWA – Association of Clean Water Administrators
 - ASDWA – Assoc. of State Drinking Water Administrators
 - ECOS – Environmental Council of the States
 - NACWA – National Association of Clean Water Agencies
- **UNRBA**
- **Riverkeeper NY** – national consistent numeric criteria
- **Gary Hess** former EPA attorney - Insufficiently Stringent, EPA should withdraw and consult with states
- **Robert Kortmann**, Ecosystem Consulting Service, Inc need to understand individual lake systems.

Comments Summary

EPA Draft Criteria for Lakes and Reservoirs

- **Nebraska** has specific nutrient criteria approved by EPA. Use our data and other states data to review the models.
- **Tip of the Mitt Watershed Council**
 - 4 counties lower MI
 - Collect data from 60 lakes, 4 NPS EPA approved plans
 - change from reference conditions is good, no DOC data.
- **Wasatch Front Water Quality Council**
 - Coalition of 8 WWTP's in UTAH
 - a one-size-fits-all approach inherently flawed
 - ignores watershed site specific information
 - assumptions not applicable to warm water waterbodies
 - need to consider site specific conditions
 - chlorophyll not representative biomass, surf samples not
 - zoo:phyto relationships flushing, mollusks, benthos

Comment Period Extended EPA Draft Criteria for Lakes and Reservoirs

Deborah G. Nagle, Office of Science and Technology,
signed an extension notice on July 15, 2020
to extend the comment period for 30 days:

Until AUGUST 20, 2020

UNRBA Comments – ten pages

EPA Draft Criteria for Lakes and Reservoirs

1. Time Extension Request
2. Complexity of risk assessment model approach
3. Very limited data only two nationwide (2007, 2012) random probability surveys.
4. No consideration for climatic conditions, hydrology, spatial or temporal variability, use attainment
5. Reservoirs do not behave like natural lakes – biological gradient from upstream to downstream.

UNRBA Comments

EPA Draft Criteria for Lakes and Reservoirs

6. Lump all lakes large constructed reservoirs, deep natural lakes, and smaller lakes just 2.5 acres in size.
7. Questioned the use of zooplankton/phytoplankton (Z:P) relationships as a decision tool for aquatic life attainment.

UNRBA Comments

EPA Draft Criteria for Lakes and Reservoirs

8. The models do not adequately extend Z:P relationships to the higher food web (fish) organisms. Fish are directly linked to the designated uses of aquatic life. Fish growth and survival depend on Z:P interactions, energy flow, and predation. Therefore, the amount and types of fish present are better indicators of the ecological health of a lake or reservoir than Z:P.

UNRBA Comments

EPA Draft Criteria for Lakes and Reservoirs

9. EPA has not tested the models on eutrophic reservoirs with full designated use attainment and no history of algae problems or impacts.
10. The models have not been tested on eutrophic reservoirs with problems such as frequent harmful or nuisance algal blooms, frequent fish kills, or poor fish community assessments.

UNRBA Comments

EPA Draft Criteria for Lakes and Reservoirs

11. EPA seems to be suggesting that eutrophic water bodies cannot attain all designated uses. The models seem to offer a continental approach for probability estimates of trophic conditions rather than evaluations of designated uses.

UNRBA Comments

EPA Draft Criteria for Lakes and Reservoirs

12. The need for site-specific considerations is essential to the successful establishment of regulatory goals. The ideal approach is to develop site-specific criteria based on site-specific conditions, studies, evaluations, and the spatial/temporal driving factors of loading, hydrology, retention time, color, seasonal dynamics, and the frequency of uncontrollable severe climatic events and a suite of modeled scenarios.

Modeling and Regulatory Support (MRS) Status

MRS Status

- Systech Water Resources is modifying the Watershed Analysis Risk Management Framework (WARMF) model code to simulate many types of onsite wastewater treatment systems (319 grant funded)
- Model development and reporting for WARMF watershed water quality modeling is underway
 - Air chemistry (wet and dry deposition)
 - Soil chemistry
 - Wastewater treatment plant effluent
 - Nutrient applicant rates
 - Onsite wastewater treatment systems
- Discussed WARMF Lake segmentation with Executive Director and subject matter experts
 - Present recommendation during the September 1, 2020 MRSW meeting

Other Status Items

Ongoing Items

- Communications work for 2020-2021
- Coordination with the UNC Collaboratory
- Legal Support
 - Engagement Letter and Scope of Work finalized
 - Scope of Work to focus on development plan for site specific chlorophyll-a standard
 - Conference call meeting with the Legal Group and Barnes and Thornburg to be scheduled
 - Status reports to PFC at August and Sept. meetings
- Ongoing DEQ/DWR Items
 - 2019 UNRBA Data Report meeting
 - Schedule for face to face when possible
 - IAIA Program meeting with DEQ/DWR
 - Schedule for face to face when possible
 - 303(d), chlorophyll-a listing, and lake segmentation
 - MOA for re-examination

Future Meetings as Currently Scheduled:

Next MRSW Meeting

September 1, 2020, 9:00 AM to 10:30 AM
Remote Meeting

Next PFC Meeting

September 1, 2020, 10:40 AM to 1:10 PM
Remote Meeting

Next BOD Meeting

September 16, 2020, 9:30 AM to Noon
Remote Meeting

Closing Comments Additional Discussion