



LUBGWMA Committee Meeting 11

11 / 09 / 2023

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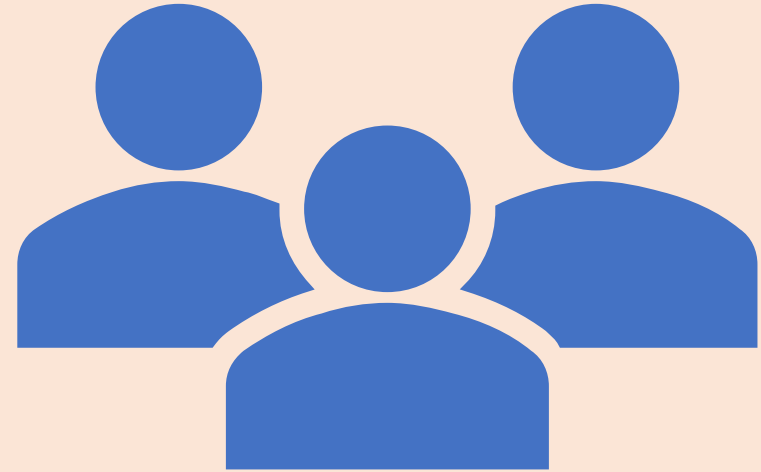
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HOSTED BY
SALINI SASIDHARAN
OREGON STATE UNIVERSITY

Agenda

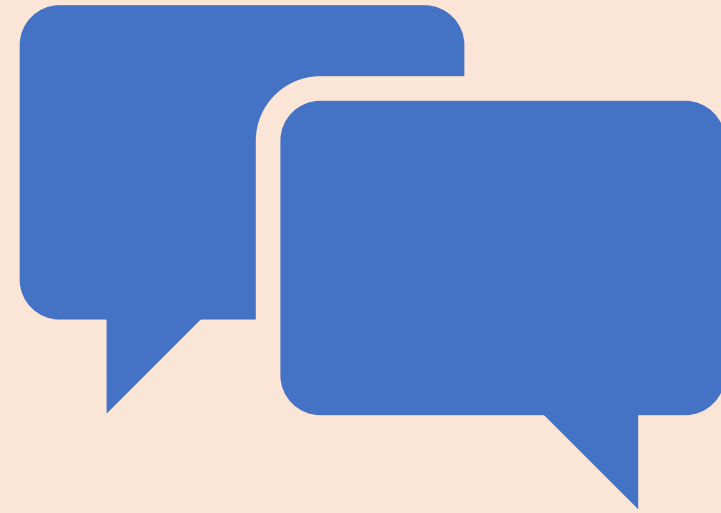
Time	Action Item
9:00 am - 9:10 am	Welcome; present agenda and recap. Salini Sasidharan
9:10 am - 9:15 am	Introduction LUBGWMA Committee Members
9:15 am – 9:30 am	Communication Structure Salini Sasidharan
9:30 am – 10:00 am	Update on Roadmap based on Workshop Outcome Salini Sasidharan and HDR
10:00 am – 10:30 am	State Agency +SWCD Update Laura Gleim-DEQ and Kevin Payne
10:30 – 11:00 am	General Update (LUBGWMA Committee/General Public)
11:00 am	Adjourn

Introduction LUBGWMA Committee Members



Communication Structure

Salini Sasidharan



LUBGWMA WEBPAGE



[Subcommittee Information](#)



[Meeting Schedule](#)

Update on Roadmap based on Workshop Outcome

- **Salini Sasidharan**

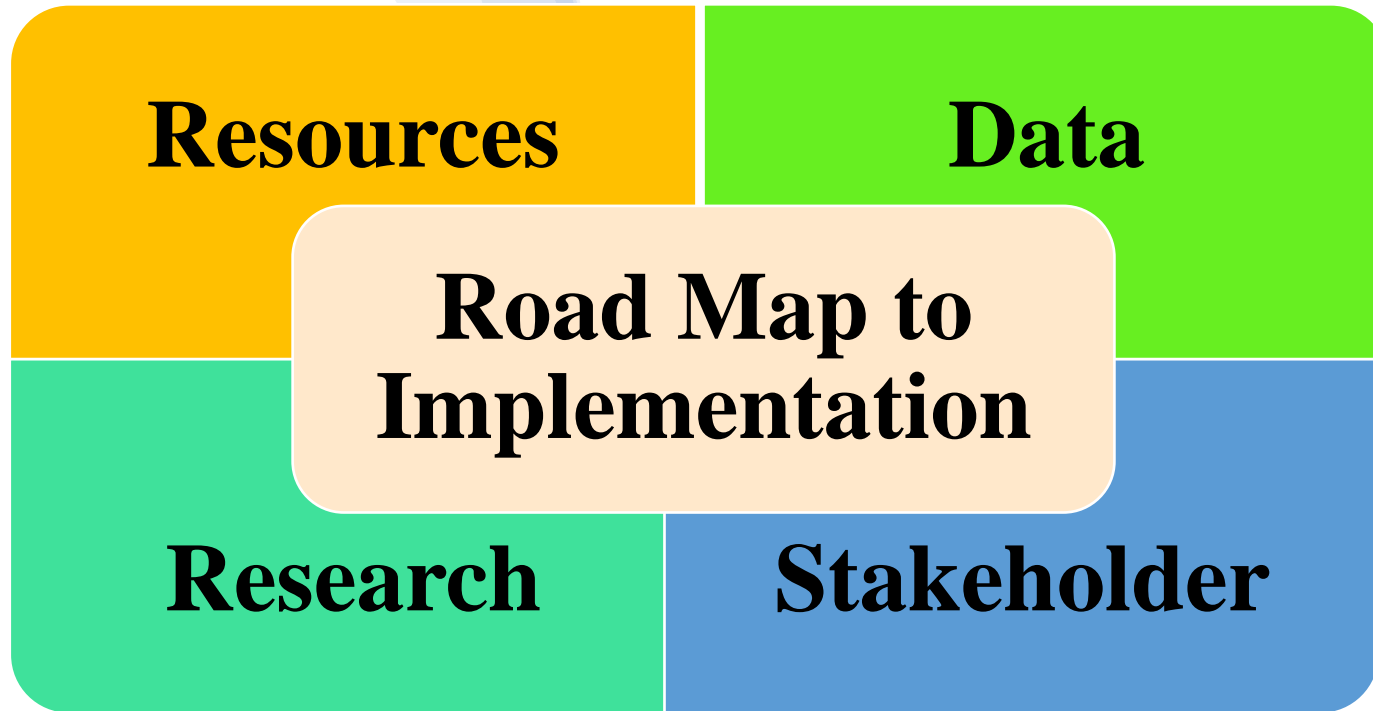
Oregon State University

- **Gregg Jones**

HDR

10:55 am – 11:35 am

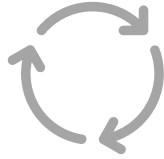




Action-Based Categorization for Clear Implementation Roadmap



**Groundwater
Research and
Modeling**



**Best
Management
Practices
(BMPs)
Development
and
Implementation**



**Education,
Outreach, and
Public
Awareness**



**Monitoring and
Assessment**

Navigating Progress: Goals and Their Current Status

Goals Achieved



- **Feedback**
- **Timeline of Success Indicator**

Goals Under Implementation



- **Feedback**
- **Challenges**
- **Resources Required**
- **Collaboration Required**
- **Timeline of Implementation**
- **Timeline of Success Indicator**

Goals Require Additional Information



- **Feedback**
- **Challenges**
- **Resources Required**
- **Collaboration Required**
- **Timeline of Implementation**
- **Timeline of Success Indicator**

Goals Need to be Updated/Merged//New Goals



- **Strategies and new actions**
- **Resources Required**
- **Collaboration Required**
- **Timeline of Implementation**
- **Timeline of Success Indicator**

Lack of Resources



Dedicated Funding: A budget to fund projects, research, and community engagement.



Trained Personnel: Experts to provide technical guidance and drive initiatives.



Strategic Partnerships: Collaborations with agencies and stakeholders.



Access to Quality Data: Reliable data for informed decisions and monitoring.



Communication Platforms: Tools for streamlined committee communication and stakeholder engagement.

Roadmap Framework HDR

What is it?

A clear and readily implementable strategy for how ground water nitrate in the LUBGWMA can be reduced within a reasonable timeframe.

Process

- Promotes organization and coordination
- Strong oversight to drive process forward
- Communications plan
- Dedicated sources of funding
- Incentive-based solutions

Technical

- Divides the LUBGWMA into manageable divisions (pilot project areas).
- Systematically implements small-scale research projects (pilot projects) that apply proven nitrogen reducing BMPs for the major land uses in these areas.
- Does not reinvent the wheel – uses what's already in place and what's already been learned.
- Centralized Best Management Practices (BMP) project data base.
- Provides plan to expand BMPs basin-wide

Key Elements of the Roadmap Framework - HDR

Process Elements

- Establish Roles & Responsibilities in Regard to Roadmap Elements
- Establish Effective Oversight
- Strategic Communications Plan

Technical Elements

- Establish Pilot Project Areas
- Identify Appropriate Best Management Practices (BMPs)
- Identify/Recruit Land Use Group Participants
- Identify Researchers to Conduct Pilot Projects
- Implement, Complete and Evaluate Pilot Projects and Promote Successes
- Basin-Wide Implementation

Establish Roles and Responsibilities - HDR

Clarify roles and responsibilities of Committee members in regard to the roadmap elements.

Enhances the existing decision-making process by further defining of the roles and responsibilities.

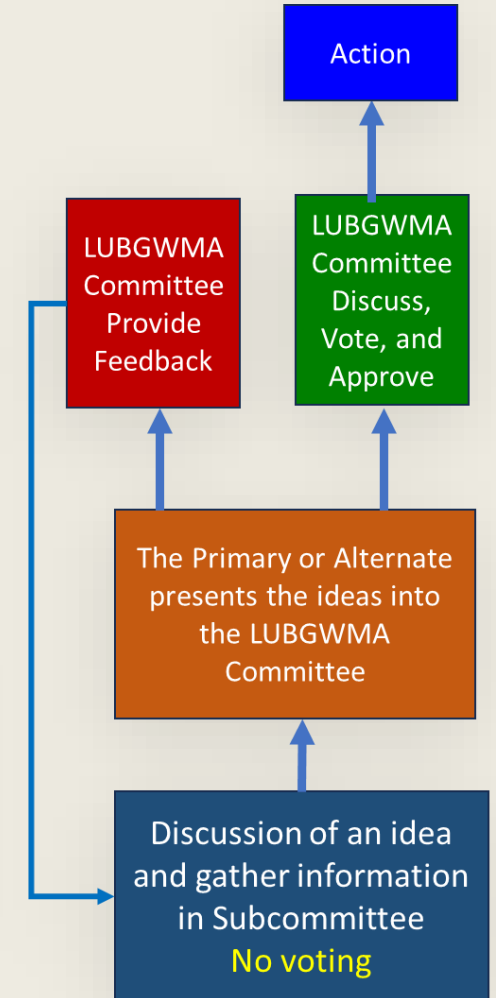
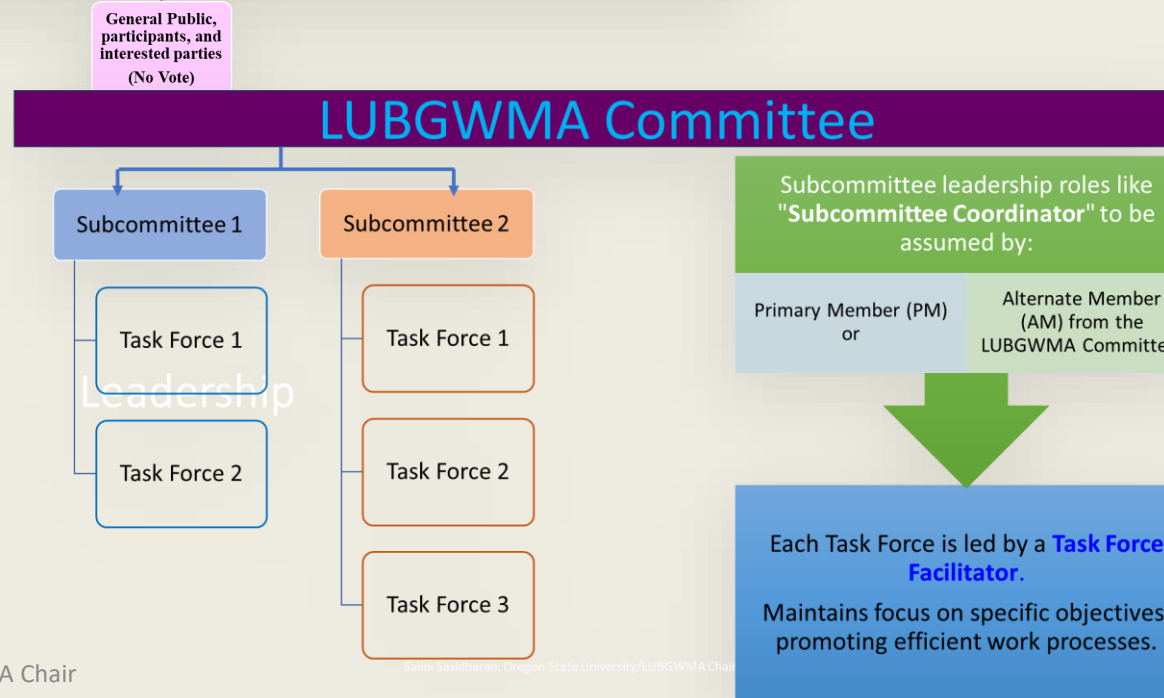
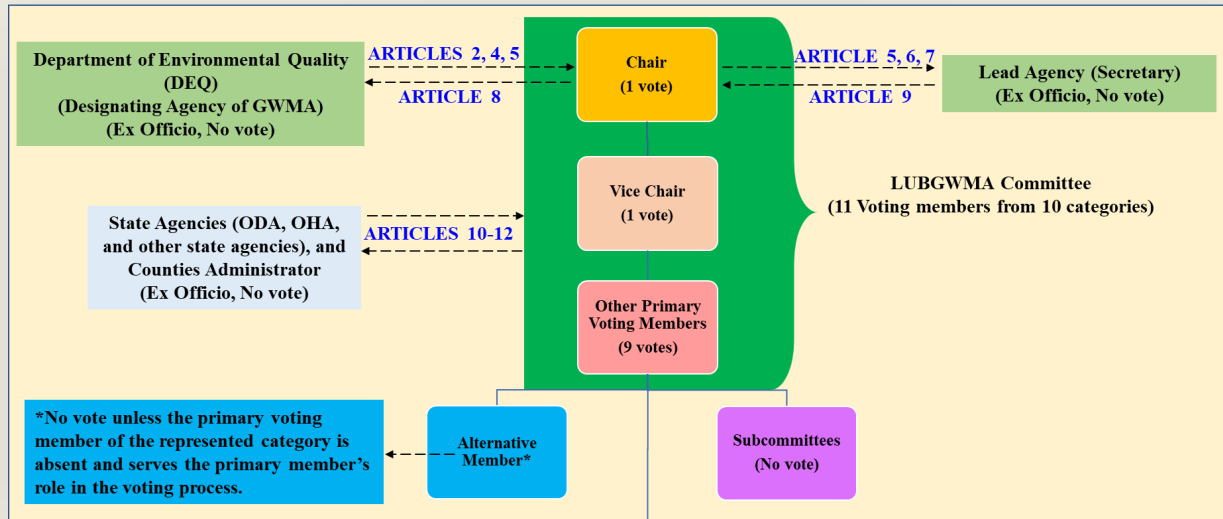
Creates a vision statement to guide the Committee.

- States the Committee's intention and reason for existence.
- Conveys the Committee's values and commitments to achieving its goals.

Creates a process to secure dedicated sources of funding

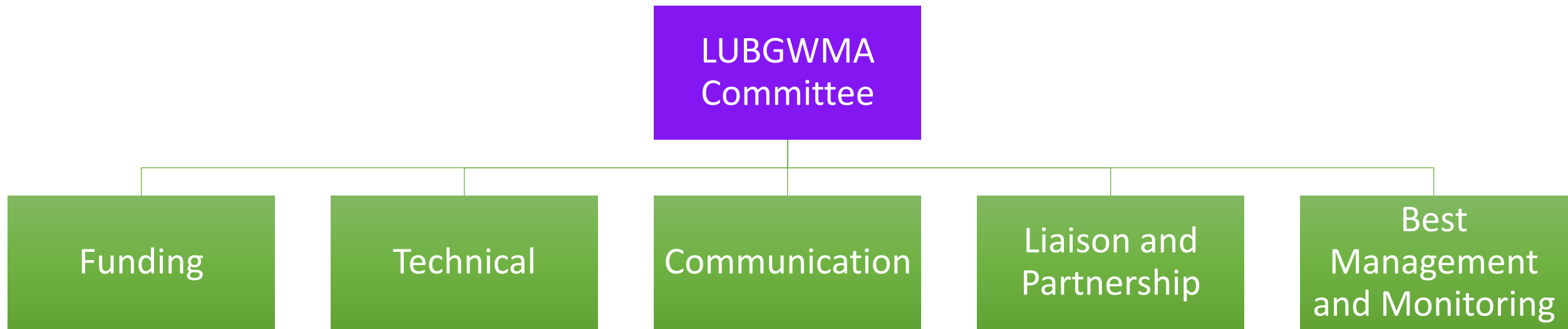
Structure and Decision-Making Process

LUBGWMA Committee Organizational Structure



**BYLAW
Established**

LUBGWMA Committee Structure



1. Funding Subcommittee

Objective: To source and allocate financial resources effectively for the overall operations and specific projects of the LUBGWMA Committee.

Subcommittee Coordinator/s:

Dan Dorran (PM)

Gregg Harris(AM)

Task Forces

a. Political/Legislative Funding Task Force

Aim: To cultivate partnerships at State, Federal, Local, Regional, and Private levels, leveraging political and legislative opportunities.

Task Force Facilitator/s: **Gregg Harris (PM)**

b. Research Funding Task Force

Aim: To find collaborative State, Federal, and Private research funds, ensuring sustainable research backing for the LUBGWMA initiatives.

Task Force Facilitator: **Salini Sasidharan (PM)**

2. Technical Subcommittee

Objective: To gather, analyze, and manage all data relevant to the LUBGWMA, ensuring the Committee's strategies are data-driven.

Subcommittee Coordinator/s:

Salini Sasidharan (PM)

Ian Toevs (AM)

Task Force

a. Hydrogeology of the Basin Task Force

Aim: To continuously study and update the basin's hydrogeological profile, ensuring LUBGWMA's strategies align with current realities.

Task Force Facilitator/s: Salini Sasidharan (PM)

b. Postdoc Task Force

To harness postdoc researchers' research and analytical capabilities for the benefit of LUBGWMA

Task Force Facilitator/s: Dan Dorran (PM)

c. Bylaw Task Force

Task Force Facilitator/s:

3. Communication Subcommittee

Objective: To disseminate information effectively within the LUBGWMA and to external stakeholders, ensuring transparency and fostering partnerships.

Subcommittee Coordinator/s:

Misty Edgecomb (PM)

Debbie Radie (AM)

Task Force

a. Direct Outreach Task Force

Aim: To maintain open channels with stakeholders, using direct interactions to keep them informed and involved.

Task Force Facilitator/s:

b. Formal Communications Task Force

Aim: To ensure that all official communications, announcements, and publications are consistent and accurately reflect the LUBGWMA's stance. This includes the LUBGWMA website and email management.

Task Force Facilitator/s: **Salini Sasidharan**

Kevin Payne

Laura Gleim

Dan Dorran

4. Liaison and Partnership Subcommittee

Objective: To navigate the regulatory landscape, ensuring LUBGWMA's activities remain compliant and foster strong regulatory partnerships.

Subcommittee Coordinator/s:

Jake Madison (PM)

Karen Lewotsky (AM)

Task Force

a. Nonregulatory Agency Relationship Task Force

Aim: To cultivate and maintain productive relationships with nonregulatory key federal and state agencies as well as, city and county governments, and other local agencies

Task Force Facilitator/s:

b. Regulatory Agency Partners Task Force

Aim: To ensure smooth collaborations with bodies like OWRD, ODA, DEQ, OHA, OWEB, and DOGAMI, aligning the Committee's actions with their guidelines and projects in LUBGWMA.

Task Force Facilitator/s:

5. Best Management and Monitoring Subcommittee

Objective: To oversee and continually refine strategies for monitoring Best Management Practices (BMP) and groundwater quality for LUBGWMA initiatives.

Subcommittee Coordinator/s:

Bob Waldher (PM)

Tamra Mabbott (AM)

Task Force

a. Innovation and Technology in BMP Task Force

Aim: To ensure the LUBGWMA stays at the cutting edge of Best Management Practices (BMP), leveraging the latest technology and innovation.

Task Force Facilitator/s: *Jake Madison*

b. Monitoring Technologies and Tools Task Force

Aim: To explore, evaluate, and recommend the latest monitoring tools, technologies, and software that can be adopted to improve oversight and data collection.

Task Force Facilitator/s: *Gregg Harris*

Establish Effective Oversight - HDR

Appoint an independent, empowered facilitator with the local knowledge, relationships, and skillset necessary to foster efficient leadership.

The facilitator will:

- Lead coordination between the Committee and local governments, land use groups, the public, and interested parties.
- Foster coalition between agencies to reduce overlap, redundancy and conflicts.
- Facilitate consensus on roles, responsibilities, and schedules.
- Facilitate progress tracking and documentation of initiatives.
- Identify disagreements and roadblocks and work to overcome them.
- Coordinate funding efforts between the Committee, agencies, and government.



2. Establish Effective Oversight

Trained Personnel/Facilitator:
Experts to provide technical guidance and drive initiatives and act as a liaison between the committee and the state agencies

Develop Strategic Communications Plan - HDR

Inform and Educate Stakeholders About the Actions of the Committee.

- Promote Committee initiatives
- Share progress
- Promote successes
- Build stakeholder support for basin-wide implementation
- Influence elected officials to provide support
- Help establish dedicated funding sources

3. Strategic Communications Plan



Establishment of
Communication Subcommittee



Establishment of updated
LUBGWMA Webpage



Establishment of Liaison and
Partnership Subcommittee

Key Elements of the Roadmap Framework - HDR

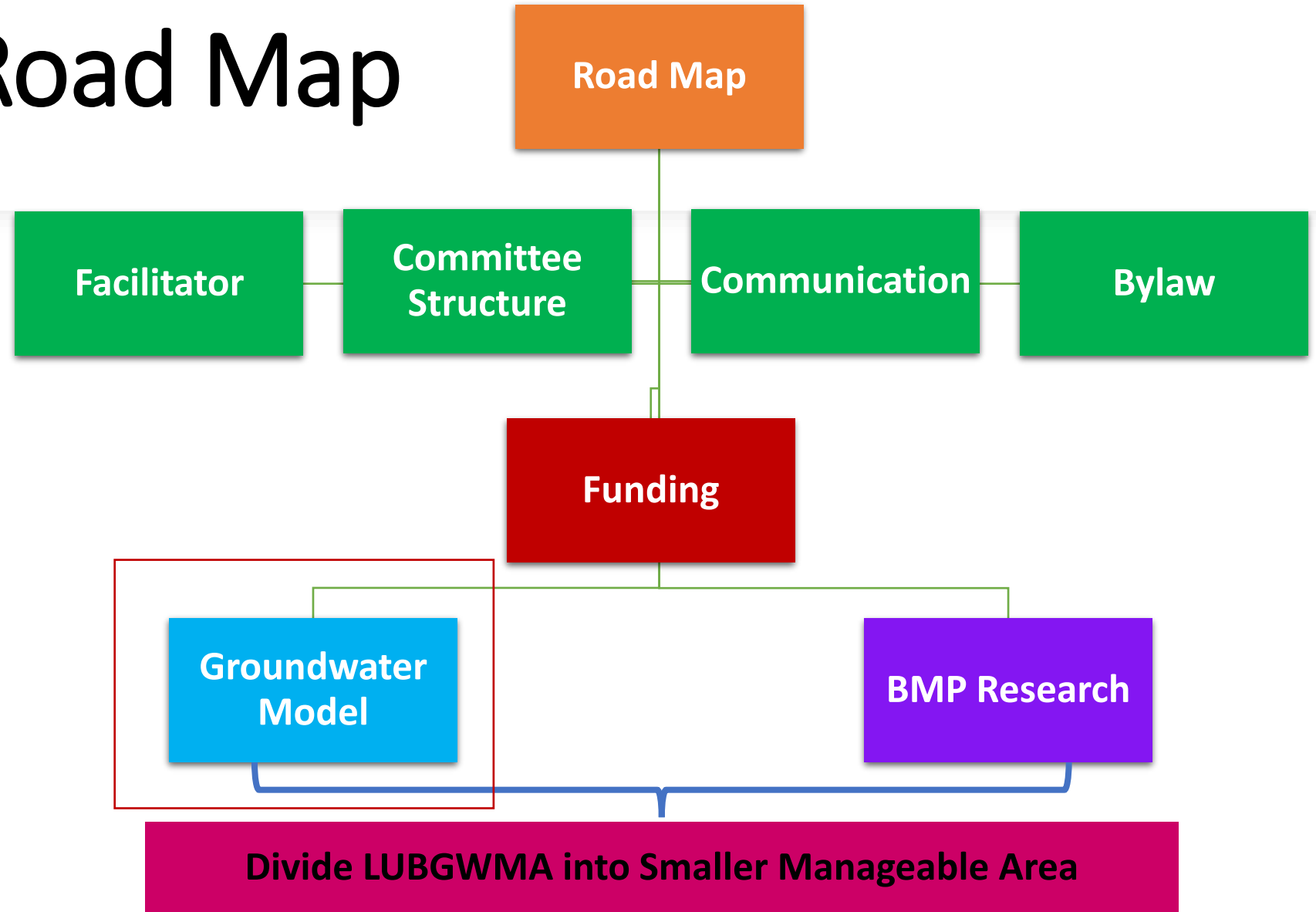
Process Elements

- Establish Roles & Responsibilities in Regard to Roadmap Elements
- Establish Effective Oversight
- Strategic Communications Plan

Technical Elements

- Establish Pilot Project Areas
- Identify Appropriate Best Management Practices (BMPs)
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Merged Road Map



Updated Roadmap Framework

Technical Elements BMP

- Establish Pilot Project Areas
- Identify Appropriate Best Management Practices (BMPs)
- Identify/Recruit Land Use Group Participants
- Identify Researchers to Conduct Pilot Projects
- Implement, Complete and Evaluate Pilot Projects and Promote Successes
- Basin-Wide Implementation

Technical Elements Groundwater Model

1. Data Compilation

1. Hydrogeology, nitrate concentrations, land use, and climate
2. Basis for model parameters

2. Conceptual Framework

1. Groundwater-nitrate interaction and source mapping
2. Visualization of flow and contamination paths

3. Model Configuration

1. Software selection (e.g., MODFLOW, MT3DMS)
2. Calibration against observed data

4. Model Testing

1. Independent data validation
2. Uncertainty and sensitivity analysis

5. Scenario Evaluation

1. Impact of land use and management changes
2. Predictive outcomes for decision support

Divide LUBGWMA into Smaller Manageable Area

**OSU
Hydrogeology
Conceptual
Model**

**Existing
Monitoring
Network**

**ODA
Strategic
Implementation
Area**

**Existing BMP
locations**

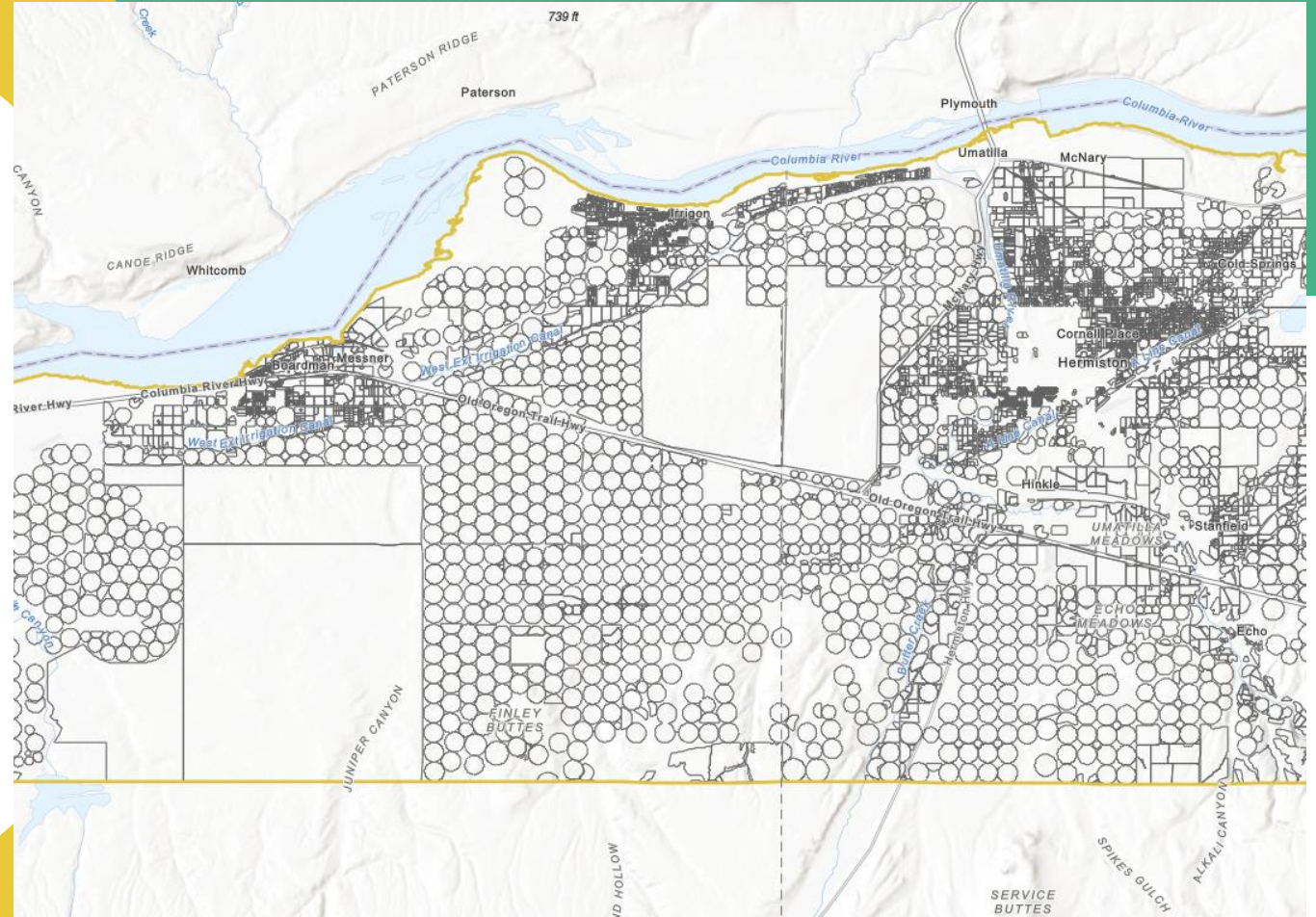
Establish Pilot Project Areas - HDR

Basin will be divided into small manageable areas where best management practice (BMP) projects can be implemented and carefully studied for all the major land uses.

- Technical representatives of the Committee will collaborate to establish criteria for pilot project areas.
- Pilot project areas will be chosen where sufficient availability of data exists to minimize the need for additional data collection.
- An inventory of BMPs that are currently in place and in progress will be compiled and integrated into the pilot project area process.
- New BMPs must have been successfully implemented in other areas with similar climate, soils, hydrogeology, irrigation practices, subdivision densities, CAFO densities, etc.
- Centralized data base will be created to store and manage all aspects of existing and new BMP project data. A data base manager will be identified to receive, upload, manage, and report on the BMP data.

LUBGWMA Update 11-09-2023

- Update Ag WQ Area Plans
- Groundwater Strategic Implementation Area
- WaterSMART Grant
- Crop & Sprinkler Inventory



Willow Creek & Umatilla Ag Water Quality Management Area Plans



Updating Plans Now



Goal to include focused efforts on groundwater and groundwater measurable objectives



Finalization with Local Advisory Committee
Target Date:
January, 2024

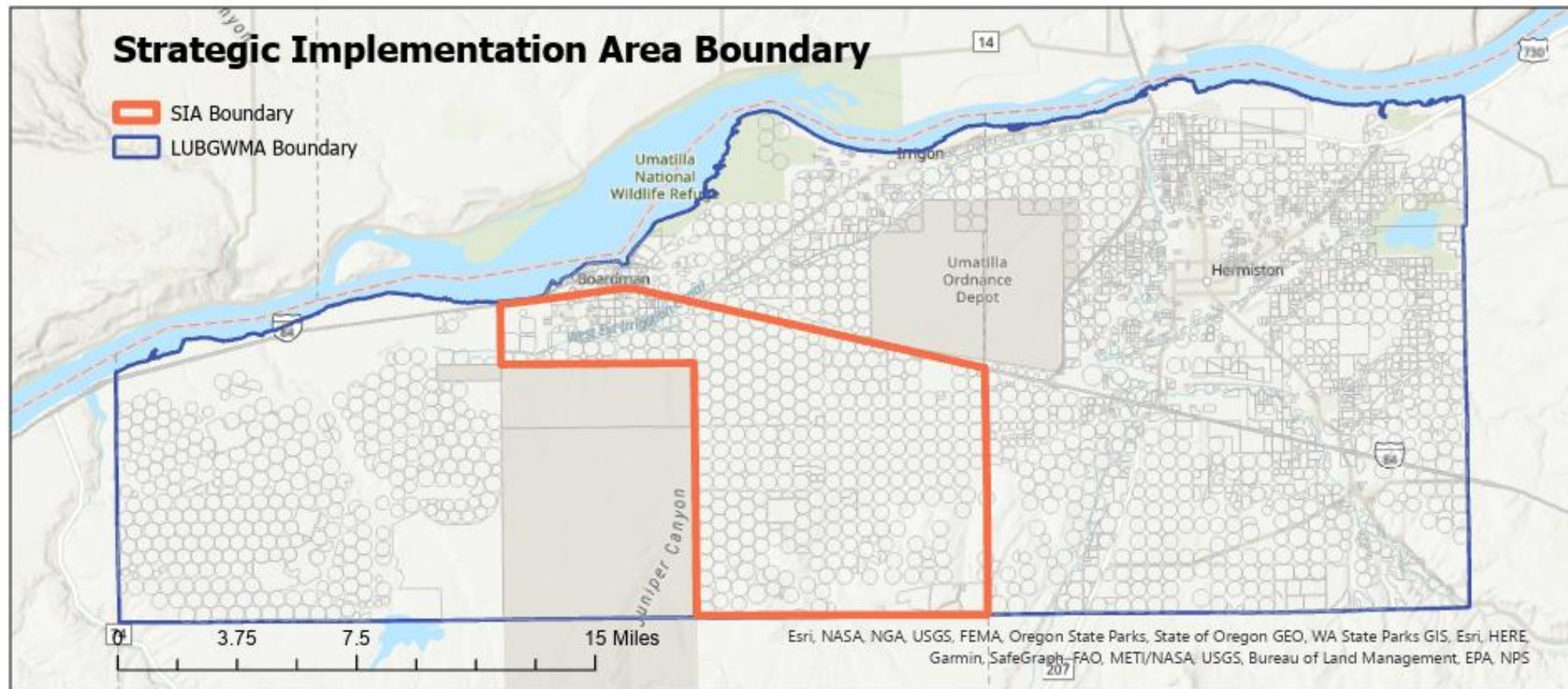
ODA LUBGWMA Irrigated Ag SIA (Strategic Implementation Area)

Partner - Morrow SWCD

Listen, Learn, Assist, Demonstrate

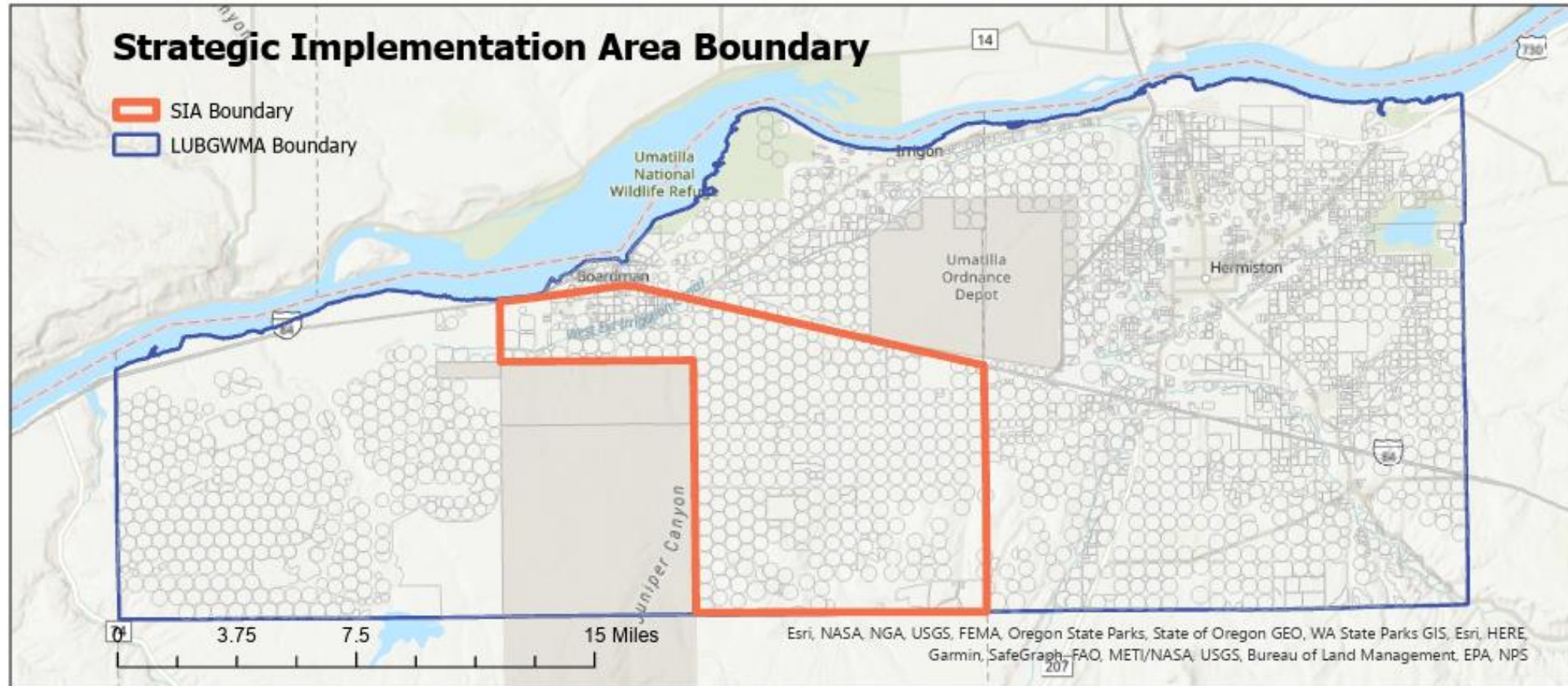
- ***Listen*** to what Irrigation Management practices are being utilized
- ***Learn*** the local Ag inputs, processor inputs, and market hurdles
- ***Assist*** growers with Management Plans and obtaining management monitoring tools
- ***Demonstrate*** Irrigated Ag utilizing effective irrigation management for the Community

LUBGWMA SIA Area Preliminary



**OREGON
DEPARTMENT OF
AGRICULTURE**

LUBGWMA SIA Area Preliminary



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AGRICULTURE**

WaterSMART Grant Application

Partner (SWCD) Communication

Design and develop a partner (SWCD) data website hub that allows data entry (crop & sprinkler, practices completed (SOW Data)) and analysis for increased efficiency of analysis and data sharing.

Public Communication

Design and develop a public information hub, with direct engagement of stakeholders by a community outreach effort to obtain content feedback on public water quality data for ag landowners, Tribal governments, cities and county governments.



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DEPARTMENT OF
AGRICULTURE**

WaterSMART Grant Application

Crop & Sprinkler Inventory Web Display/Tools

Create an accurate, viewable crop and sprinkler type inventory website layer for analysis, quantification of water and nutrient loading potentials, and data for irrigation/nutrient management practices.

Nitrate Utilization & Leaching Sampling

Utilize contractors/OSU to develop and implement a nitrogen utilization and/or leaching potential study on irrigated lands within the LUBGWMA.

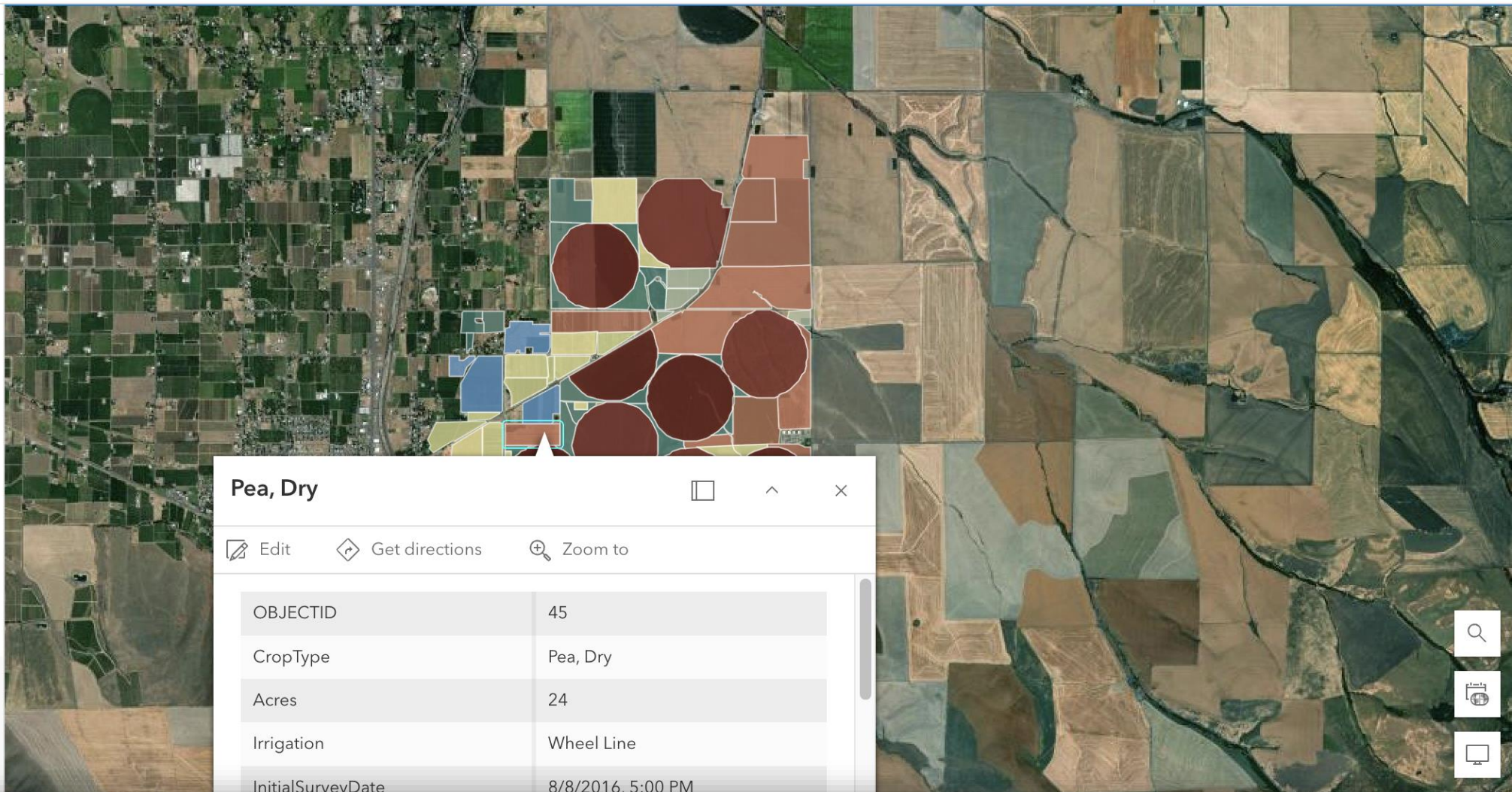


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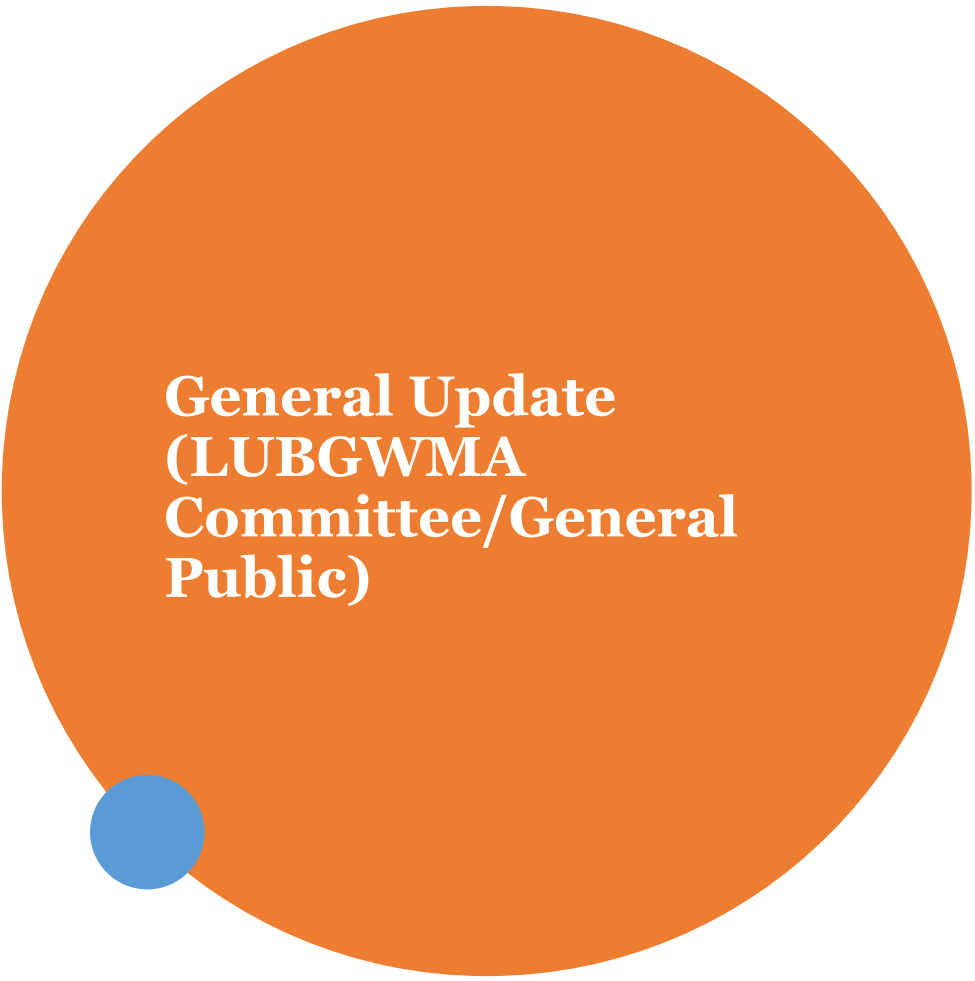
Legend

Sample of AgFields

- None
- Sprinkler
- Wheel Line
- Center Pivot
- Drip
- Micro-Sprinkler
- Big Gun
- Big Gun/Center Pivot
- Big Gun/Center Pivot/Wheel Line
- Big Gun/Drip
- Other




Crop and Sprinkler Type Inventory – by Morrow SWCD



**General Update
(LUBGWMA
Committee/General
Public)**

10:30 – 11:00 am



Next Meeting – Virtual Only

**December 9th – 9:00
am to 11:00 am**

