

AGENDA
 IRVINE RANCH WATER DISTRICT
 ENGINEERING AND OPERATIONS COMMITTEE MEETING
 WEDNESDAY, OCTOBER 9, 2024

This meeting will be held in-person at the District’s headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: <https://irwd.webex.com/irwd/j.php?MTID=m67e7e5d1a2c1f00bab55679646c65f87>
 Meeting Number (Access Code): 2499 778 6048
 Meeting password: umNJx8abx23

PLEASE NOTE: Webex observers of the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Board once the closed session has concluded. Observers joining the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to observe the meeting once the closed session has concluded.

CALL TO ORDER 1:30 p.m.

ATTENDANCE Committee Chair: Karen McLaughlin _____
 Committee Member: John Withers _____

ALSO PRESENT Paul Cook _____ Kevin Burton _____ Wendy Chambers _____
 Neveen Adly _____ Paul Weghorst _____ Steve Choi _____
 Jim Colston _____ Jason Manning _____ Jose Zepeda _____
 Rich Mori _____ Eric Akiyoshi _____ Malcolm Cortez _____
 Jacob Moeder _____ Harry Cho _____ Alex Murphy _____
 _____ _____ _____ _____ _____
 _____ _____ _____ _____ _____

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 8:00 a.m. on Wednesday, October 9, 2024.

COMMUNICATIONS

1. Notes: Burton
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted and determine which items may be approved without discussion.

INFORMATION

- | | |
|---|--|
| <ol style="list-style-type: none">4. <u>IRWD RESEARCH BUSINESS PLAN UPDATE – COLSTON / BURTON</u>

Recommendation: Receive and file.5. <u>MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN – CHOI / BURTON</u>

Recommendation: Receive and file. | |
|---|--|

OTHER BUSINESS

6. Directors’ Comments
7. Closed Session
 - A. CLOSED SESSION – THREAT TO PUBLIC SERVICES OR FACILITIES —
Pursuant to Government Code Section 54957(a): Consultation with Joe Lam, IRWD Automation Manager.
8. Open Session
9. Adjournment

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District’s office, 15600 Sand Canyon Avenue, Irvine, California (“District Office”). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

October 9, 2024
Prepared by: J. Colston
Submitted by: K. Burton
Approved by: Paul A. Cook



ENGINEERING AND OPERATIONS COMMITTEE

IRWD RESEARCH BUSINESS PLAN UPDATE

SUMMARY:

Staff will provide an update on the research projects in which IRWD is currently involved.

BACKGROUND:

Periodically, IRWD receives requests to participate in various research projects pertaining to emerging technologies through either direct funding or dedication of in-kind staff resources. Guidelines were developed to assist staff with its evaluation and response to those requests. These guidelines were incorporated into the IRWD Research Business Plan, which also provides a tracking mechanism for the various requests and ongoing research projects and programs in which IRWD participates. The Research Business Plan ensure that IRWD's research resources are being prioritized and utilized effectively.

One of the components of the Research Business Plan is for staff to provide a status update on the research projects to the Engineering and Operations Committee on a quarterly basis. IRWD actively participates in the Technology Approval Group (TAG) sponsored by Isle Utilities. The TAG hosts numerous developing technology providers to match interested agencies with their technologies. The following summarizes the changes since the previous quarterly report:

- Biosolids Pellets Land Application Crop Study – The first manuscript from the research has been published, and additional research is ongoing.
- UCI CDC Sponsored PFAS Epidemiological Study – UCI is conducting a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water tainted with Per- and Poly-fluoroalkyl substances (PFAS). Researchers have added a PFAS Child Immune Study to this research. Outreach on this additional component has been sent to residents in the areas covered by the Epidemiological Study, including Irvine. The team has also drafted “City Letters” to be sent to local officials explaining the results of the research and recommending any public health actions.
- Request for Participation: UCI Microplastics Method Development Study – UCI professor Diego Rosso has requested that IRWD participate in an advisory capacity for a Water Research Foundation (WRF) research project regarding the development of methods for the characterization and sampling of microplastics (WRF #5287). IRWD Water Quality Laboratory Manager Scott Giatpaiboon has volunteered to serve as a member of the advisory panel with other experts from wastewater utilities including Los Angeles County Sanitation District, Central Contra Costa Sanitation District, South Orange County Water Authority, and Clean Water Services.

A summary of the current research projects is attached as Exhibit “A”.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:


Exhibit "A" – Research Projects Summary

Exhibit "A"

Research Projects Summary Table

No.	Project Title	Project Description	IRWD Contact	Organizations Involved	Type of Research	IRWD Participation Resource	Start Date	Projected Completion Date
1	Biosolids Pellets Land Application Crop Study	The primary goal is to determine if ~40-50 of the roughly 400 unregulated organic contaminants listed in the 'EPA contaminants in biosolids database' can be found in, or remain in, the edible portions of food and feed crops following land application at standard agronomic rates based on the nitrogen needs of the test crop.	Zepeda	UC Riverside/South Coast Research and Education Center in Irvine with funding by USEPA	Field study with laboratory analysis of biosolids and crops	Provide Class A biosolids pellets (approximately 1-2 tons of material)	Apr-22	TBD
2	UCI CDC Sponsored PFAS Epidemiological Study	UCI is conducting a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water. Due to localized PFAS contamination in some Orange County drinking water sources, the CDC is sponsoring research to determine potential public health effects. IRWD's Irvine service area is seen as an ideal control population due to the lack of PFAS in IRWD's served potable water.	Colston	UCI, OCWD, IRWD, CDC	Epidemiological that seeks 1,000 adults and 300 children for blood serum level testing.	Assistance in determining historic sources of drinking water in IRWD's service area.	Jan-23	Early 2025
3	UCI Microplastics Method Development Study	Participate in an advisory capacity for a Water Research Foundation (WRF) research project regarding the development of methods for the characterization and sampling of microplastics (WRF #5287).	Giatpaiboon	UCI, WRF, other utilities	Method development	Project advisory role for WQ Manager	Oct-24	TBD

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October 9, 2024
Prepared by: S. Choi
Submitted by: K. Burton
Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

SUMMARY:

A Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) provides a framework to improve local resilience to hazard events and to reduce water and wastewater infrastructure vulnerabilities due to identified hazards of concern. A MJHMP can also be used to satisfy eligibility requirements for the Federal Hazard Mitigation Grant Program and the Building Resilient Infrastructure and Communities program related to hazard mitigation and capital projects. IRWD is currently working with the Water Emergency Response Organization of Orange County (WEROC) to draft an MJHMP for IRWD. At the Committee meeting, staff will provide an overview of the MJHMP efforts and an outline of the steps required to finalize the MJHMP.

BACKGROUND:

The Federal Emergency Management Agency (FEMA) defines “hazard mitigation” as any action taken to reduce or eliminate the long-term risk to human life and property from human-caused and natural events such as earthquakes, severe weather, wildfires, and other hazards. Hazard mitigation is the prevention component of the emergency management process and includes three components: Hazard Profiles, Vulnerability Assessment, and Mitigation Strategies. In addition to helping protect assets and properties, hazard mitigation plans provide eligibility for FEMA grants that can be used to further improve safety and preparedness in a community.

In October 2020, IRWD developed the District’s Hazard Mitigation Plan. The plan was adopted by the Board in October 2021 and submitted to the California Office of Emergency Services (CalOES) and FEMA for review; this plan was approved through December 2026. The Hazard Mitigation Plan is required to be reviewed and updated every five years.

Although IRWD’s Hazard Mitigation Plan update is not due until December 2026, IRWD is partnering with WEROC who has retained a technical consultant to work with member agencies in developing MJHMPs. IRWD’s participation in this process will allow for multi-agency collaboration and put IRWD on the same update cycle as the other WEROC member agencies participating in the development of the MJHMP. A draft MJHMP is anticipated to be issued in the coming months, followed by submission of the draft MJHMP to CalOES and FEMA. Staff expects to present to the Board a final MJHMP for adoption in spring 2025. To better understand the scope of the proposed MJHMP, the Table of Contents from the District’s 2021 Hazard Mitigation Plan is provided as Exhibit “A” as a reference.

FISCAL IMPACTS:

Funding for this project is available in the Fiscal Year 2024-25 Operating Budget. The total consultant cost to support the MJHMP update is \$150,000 of which IRWD’s share is \$8,900.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – IRWD 2021 Hazard Mitigation Plan, Table of Contents



TABLE OF CONTENTS

Section 1: Introduction and Purpose 1-1

1.1 Plan Purpose 1-1

1.2 Mitigation Goals..... 1-2

1.3 Plan Authority 1-2

 Federal 1-2

 State 1-2

1.4 Plan Adoption 1-2

1.5 Plan Organization 1-3

Section 2: Planning Process..... 2-1

2.1 Organizing Resources 2-1

 2.1.1 Project Management Team 2-1

 2.1.2 LHMP Planning Team..... 2-2

 2.1.3 Public Outreach 2-6

 2.1.4 Review and Incorporate Existing Information 2-7

2.2 Assess Risks 2-8

 2.2.1 Identifying/Profile Hazards..... 2-8

 2.2.2 Assess Vulnerabilities..... 2-8

2.3 Develop Mitigation Plan..... 2-8

 2.3.1 Identify Goals 2-8

 2.3.2 Develop Capabilities Assessment 2-8

 2.3.3 Identify Mitigation Actions 2-9

 2.3.4 Plan Adoption and Submittal 2-9

 2.3.5 Plan Maintenance 2-9

Section 3: Jurisdictional Profile	3-1
3.1 Physical Setting	3-1
3.2 History	3-1
3.3 Critical Facilities and Facilities of Concern	3-4
Section 4: Hazard Assessment.....	4-1
4.1 Hazard Identification and Prioritization	4-1
4.1.1 Hazard Identification	4-1
4.1.2 Hazard Prioritization	4-3
4.2 Hazard Identification and Prioritization	4-5
4.2.1 Dam Reservoir Failure	4-5
4.2.2 Drought Hazards.....	4-11
4.2.3 Flood Hazards	4-16
4.2.4 Geologic Hazards	4-23
4.2.5 Human Caused Hazards	4-28
4.2.6 Landslide and Mudflow	4-31
4.2.7 Seismic Hazards	4-37
4.2.8 Severe Weather	4-54
4.2.9 Wildfire	4-59
4.3 Vulnerability/Risk Assessment	4-67
4.3.1 Methodology	4-67
4.3.2 Vulnerability/Risk Assessment	4-68
4.3.3 Land Use and Development Trends/Changes in Development	4-75
4.3.4 Vulnerable Populations	4-76
4.3.5 Summary of Vulnerability	4-76

Section 5: Hazard Mitigation	5-1
5.1 Hazard Mitigation Overview.....	5-1
5.1.1 FEMA’S National Flood Insurance Program	5-1
5.1.2 Hazard Mitigation Goals	5-1
5.1.3 Hazard Mitigation Prioritization	5-2
5.1.4 Hazard Mitigation Benefit – Cost Review	5-2
5.2 Hazard Mitigation Overview.....	5-4
5.3 Capabilities Assessment	5-11
Section 6: Plan Maintenance and Capabilities	6-1
6.1 Purpose of The Plan and Authority	6-1
6.1.1 Evaluation.....	6-2
6.2 Method and Schedule for Updating the Plan within Five Years	6-2
6.2.1 Process.....	6-3
6.3 Adoption	6-4
6.4 Implementation through Existing Programs and Planning Mechanisms	6-4
6.5 Continued Public Involvement	6-6
6.6 Point of Contact	6-6
Section 7: References	7-1
Appendix	
Appendix A, IRWD Adoption Resolution	
Appendix B, LHMP Planning Team Meetings	
Appendix C, Dam/Reservoir Failure Vulnerability Assessment	
Exhibits	
Exhibit 1-1: Disaster Response Cycle	1-1
Exhibit 3-1: Regional Location.....	3-2

Exhibit 3-2: Irvine Ranch Water District Service Area	3-3
Exhibit 3-3: Irvine Ranch Water District – Critical Facilities.....	3-7
Exhibit 3-4: Irvine Ranch Water District – Distribution System.....	3-8
Exhibit 3-5: Irvine Ranch Water District – Collection System.....	3-9
Exhibit 4-1: Drought Monitor Map.....	4-14
Exhibit 4-2: U.S. Seasonal Drought Outlook	4-16
Exhibit 4-3: Flood Hazard Zone – Critical Facilities.....	4-19
Exhibit 4-4: Flood Hazard Zone – Distribution System.....	4-20
Exhibit 4-5: Flood Hazard Zone – Sewer Collection System.....	4-21
Exhibit 4-6: Surface Soil Textures of Orange County.....	4-25
Exhibit 4-7: USGS Areas of Land Subsidence in California	4-26
Exhibit 4-8: Landslide Hazard Zone – Critical Facilities	4-33
Exhibit 4-9: Landslide Hazard Zone – Distribution System	4-34
Exhibit 4-10: Landslide Hazard Zone – Sewer Collection System	4-35
Exhibit 4-11: Fault Zones – Critical Facilities.....	4-41
Exhibit 4-12: Fault Zones – Distribution System.....	4-42
Exhibit 4-13: Fault Zones – Sewer Collection System.....	4-43
Exhibit 4-14: Ground Shaking Susceptibility – Critical Facilities.....	4-46
Exhibit 4-15 Ground Shaking Susceptibility – Distribution System.....	4-47
Exhibit 4-16: Ground Shaking Susceptibility – Sewer Collections System.....	4-48
Exhibit 4-17: Liquefaction Hazard Zone – Critical Facilities	4-49
Exhibit 4-18: Liquefaction Hazard Zone – Distribution System	4-50
Exhibit 4-19: Liquefaction Hazard Zone – Collection System	4-51
Exhibit 4-20: Wildfire Hazard Zone – Critical Facilities.....	4-61

Exhibit 4-21: Wildfire Hazard Zone – Distribution System..... 4-62

Exhibit 4-22: Wildfire Hazard Zone – Sewer Collection System..... 4-63

Tables

Table 2-1: DMA 2000 CFR Crosswalk 2-1

Table 2-2: LHMP Planning Team 2-3

Table 2-3: Planning Team Meeting Summary 2-6

Table 2-4: Primary Plan Resources..... 2-7

Table 3-1: IRWD Water Portfolio 3-1

Table 3-2: Consolidated Districts in IRWD History 3-4

Table 3-3: Irvine Ranch Water Districts Critical Facilities and Facilities of Concern 3-5

Table 4-1: IRWD Hazard Identification 4-1

Table 4-2: Hazard Ranking Methodology 4-3

Table 4-3: Hazard Rankings..... 4-4

Table 4-4: DSOD Downstream Hazard Potential Classification Levels..... 4-7

Table 4-5: DSOD Condition Assessment Rating Levels 4-7

Table 4-6: IRWD Dams 4-8

Table 4-7: IRWD Reservoirs..... 4-8

Table 4-8: Drought Severity Classification 4-13

Table 4-9: Historical Droughts 4-15

Table 4-10: Acreage by Flood Zones 4-18

Table 4-11: Richter Scale of Earthquake Magnitude..... 4-44

Table 4-12: The Modified Mercalli Intensity Scale Summary 4-44

Table 4-13: Moment Magnitude and Modified Mercalli Intensity Scale Comparison..... 4-45

Table 4-14: Major Earthquake Faults of Particular Concern 4-52

Table 4-15: Significant Historical Earthquakes in Southern California	4-52
Table 4-16: Likelihood of One or More Earthquakes Occurring in the Next 30 Years in Orange County Region by Fault.....	4-53
Table 4-17: Monthly Average Precipitation in IRWD Service Area.....	4-56
Table 4-18: Saffir-Simpson Hurricane Wind Scale-.....	4-57
Table 4-19: Recent Fires in Orange County.....	4-64
Table 4-20: Major Wildfires in Orange County History	4-64
Table 4-21: Facilities in a Flood Hazard Zone	4-69
Table 4-22: Facilities in a Landslide Hazard Zone	4-71
Table 4-23: Facilities in a Fault Rupture Zone.....	4-72
Table 4-24: Facilities in a Liquefaction Hazard Zone	4-72
Table 4-25: Facilities in a Wildfire Hazard Zone.....	4-74
Table 4-26: RHNA Allocation for IRWD Customer Cities	4-75
Table 4-27: Risk Assessment Summary	4-77
Table 5-1: STAPLE/E Review and Selection Criteria.....	5-3
Table 5-2: Hazard Mitigation Actions	5-5
Table 5-3: Capabilities Assessment	5-11