Fires, Floods, Mud, & More: Integrated Processes

State of Idaho Status Report

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Robin Kiska, CFM, Risk MAP Program Manager

9/26/2019
2019 NORFMA

Idaho Risk MAP Update
Robin Kiska, CFM
FEMA Risk MAP Projects 2019

**NEW**
- American Falls-Idaho Falls-Henery Fork-Madison Watersheds
- Clearwater Watershed

**IN PROGRESS**
- Madison County
- Gem County
- Teton County
- Custer and Lemhi Counties
- Bigwood Watershed
- Bannock County

**LFD**
- Ada County
- Canyon County
In conjunction with FEMA and USGS’s 3DEP program, Idaho received large collections of LiDAR in 2019. This will help with all of our ongoing Risk MAP projects and our goal to increase the amount of DFIMRS for our counties.
2019 NORFMA

Idaho Mitigation Section Update
Disasters implement mitigation

DR-4443 Flood, landslide, and mudslide declared for 5 counties and 1 tribe provide mitigation funding.

HMGP disasters fund local and state mitigation actions
Implementing mitigation plan actions

Idaho Silver Jackets Team
Local Officials’ Workshops
Implementing mitigation plan actions

In cooperation with the U.S. Army Corps of Engineers and the Idaho Silver Jackets, USGS installed a flood information kiosk at Glenwood Bridge adjacent to the Boise River Greenbelt.
Implementing mitigation plan actions

Promoting Flood Awareness Week

- 6 inches of water can knock over an adult
- 12 inches can carry away a small car
- Flood water can be contaminated with hazardous materials, such as sharp debris, pesticides, fuel, and untreated sewage.
- If you come across Flood Water after a disaster, make sure to Turn Around, Don’t Drown.
Implementing mitigation plan actions

Publication addresses post-wildfire flooding
Implementing mitigation plan actions

STEM training
Implementing mitigation plan actions

Exercised Idaho Clearinghouse Plan during Operation Shared Response - Seismic Functional March 5-7, 2019
No FMAGs since 9/2018
Active Projects Update

Glenwood Bridge:
   Signage almost complete

Post Wildfire 1:
   Finished, aimed toward individuals affected by fire

Post Wildfire 2:
   Aimed toward community leaders

During and After the Disaster Workshops:
   Well attended, 85 attendees

LiDAR acquisition:
   FEMA, Boise State University, and the Idaho State University are participating in the LiDAR together.
### Idaho Statewide 9-23-2019

<table>
<thead>
<tr>
<th>NFIP Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Coverage</td>
<td>$1,634,756,600</td>
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<tr>
<td>NFIP Claims since 1978</td>
<td>$9,669,985</td>
</tr>
<tr>
<td>Total Claims since 1978</td>
<td>1,046</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$4,593,398</td>
</tr>
<tr>
<td>Total Policies (current)</td>
<td>6,195</td>
</tr>
<tr>
<td>Policies in the SFHA</td>
<td>3,125</td>
</tr>
<tr>
<td>Policies Not in the SFHA</td>
<td>3,070</td>
</tr>
</tbody>
</table>
# ID Presidentially Declared Flood Disasters

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Date</th>
<th>Incident Description</th>
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</thead>
<tbody>
<tr>
<td>4443</td>
<td>6/12/2019</td>
<td>Severe Storms, Flooding, Landslides, &amp; Mudslides</td>
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<tr>
<td>4342</td>
<td>10/7/2017</td>
<td>Extreme flooding</td>
</tr>
<tr>
<td>4333</td>
<td>8/27/2017</td>
<td>Flooding, Landslides, &amp; Mudslides</td>
</tr>
<tr>
<td>4313</td>
<td>5/18/2017</td>
<td>Severe Storms, Flooding, Landslides, &amp; Mudslides</td>
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<tr>
<td>4310</td>
<td>4/21/2017</td>
<td>Severe Winter Storms &amp; Flooding</td>
</tr>
<tr>
<td>1987</td>
<td>5/20/2011</td>
<td>Flooding, Landslides, &amp; Mudslides</td>
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<tr>
<td>1927</td>
<td>7/27/2010</td>
<td>Severe Storms &amp; Flooding</td>
</tr>
<tr>
<td>1781</td>
<td>7/31/2008</td>
<td>Flooding</td>
</tr>
<tr>
<td>1630</td>
<td>2/27/2006</td>
<td>Severe Storms &amp; Flooding</td>
</tr>
<tr>
<td>1592</td>
<td>7/6/2005</td>
<td>Heavy Rains &amp; Flooding</td>
</tr>
<tr>
<td>1177</td>
<td>6/13/1997</td>
<td>Flooding</td>
</tr>
<tr>
<td>1154</td>
<td>1/4/1997</td>
<td>Severe Storms/Flooding</td>
</tr>
<tr>
<td>1102</td>
<td>2/11/1996</td>
<td>Storms/Flooding</td>
</tr>
<tr>
<td>697</td>
<td>2/16/1984</td>
<td>Ice Jams, Flooding</td>
</tr>
<tr>
<td>505</td>
<td>6/6/1976</td>
<td>Dam Collapse</td>
</tr>
<tr>
<td>415</td>
<td>1/25/1974</td>
<td>Severe Storms, Snowmelt, Flooding</td>
</tr>
<tr>
<td>324</td>
<td>3/2/1972</td>
<td>Severe Storms, Extensive Flooding</td>
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<tr>
<td>186</td>
<td>12/31/1964</td>
<td>Heavy Rains &amp; Flooding</td>
</tr>
<tr>
<td>143</td>
<td>2/14/1963</td>
<td>Floods</td>
</tr>
<tr>
<td>120</td>
<td>2/14/1962</td>
<td>Floods</td>
</tr>
<tr>
<td>116</td>
<td>6/26/1961</td>
<td>Floods</td>
</tr>
<tr>
<td>76</td>
<td>5/27/1957</td>
<td>Floods</td>
</tr>
<tr>
<td>55</td>
<td>4/21/1956</td>
<td>Floods</td>
</tr>
</tbody>
</table>
IDAHO – NFIP trainings

1/7 - NFIP Permitting & Elevation Certificates, Orofino
1/8 - NFIP Overview, IOEM N Central EM Winter Workshop, Orofino
2/5 - NFIP Insurance Principles, Bannock County
3/14 - NFIP 101 Workshop, Gooding
3/26 - NFIP 101 Workshop, Sandpoint
3/26 - Elevation Certificate Workshop, Sandpoint
3/26 - Elevation Certificate Workshop, Kootenai County
3/27 - NFIP 101 Workshop, Post Falls
3/28 - NFIP Permitting, Bonner County
3/28 - CFM Exam, Coeur D’Alene
4/4 - Realtors Lunch & Learn NFIP Overview, Boise
6/10 - Irrigation MOA Guidance Workshop, IWUA Water Law & Resource Issues Seminar, Sun Valley
6/10 - CFM Exam Review & CFM Exam, Jefferson County
6/10 - During & After a Disaster Workshop w/Silver Jackets, Rexburg
6/11 - During & After a Disaster Workshop w/Silver Jackets, Pocatello
6/12 - During & After a Disaster Workshop w/Silver Jackets, Fruitland
6/13 - During & After a Disaster Workshop w/Silver Jackets, Lewiston
6/19 - Irrigation MOA Guidance Workshop, Assn of ID Cities Annual Conference, Boise
7/30 - Irrigation MOA Guidance, Webinar
8/6 - Irrigation MOA Guidance, Webinar
8/13 - Elevation Certificate Workshop, Boise
8/14 - Irrigation MOA Guidance Workshop, Caldwell
8/21 - Irrigation MOA Guidance Workshop, Pocatello
8/21 - Elevation Certificate Workshop, Pocatello
IDWR & FEMA
Irrigation Guidance &
Memorandum of Agreement

https://idwr.idaho.gov/floods/

NFIP General Irrigation Floodplain Development Guidance

- NFIP Irrigation and Drainage Permit Guidance Memorandum - February 28, 2019
- NFIP Irrigation and Drainage Permit Process Workshops and Webinars
- NFIP Irrigation and Drainage Permit Process Flowchart, Irrigation Permitting Chart and FAQs -September 17, 2019
- NFIP Irrigation and Drainage Permit Guidance Letters - May 20, 2019 and May 30, 2019
- Memorandum of Agreement between IDWR and FEMA - April 9, 2019
- 2019 NFIP Irrigation and Drainage Permit Guidance Webinar Presentation - August 7, 2019
Irrigation Guidance & MOA

Acronyms & Definitions:

**GIFD**: General Irrigation Floodplain Development Permit

**OCMR**: Operation, Cleaning, Maintenance, or Repair of irrigation & drainage ditches & works

**MOA**: Memorandum of Agreement
FEMA advised the State of Idaho that its statutory definition of “development” is not consistent with Federal law, & that a blanket exclusion of OCMR related activities could result in some development activity going un-permitted. The Guidance clarifies permitting requirements for irrigation & drainage development activities in SFHAs by discussing:
Irrigation Guidance & MOA

**Operation** – The regular & reoccurring performance of typical work by an irrigation or drainage entity including, but not limited to: the delivery or drainage of water, measurement of water, & adjustment of irrigation & drainage works (opening/closing gates), & all related appurtenances.
Irrigation Guidance & MOA

Cleaning - Mowing, cutting, or burning of weeds, trees & other nuisance growth, including algae growth, application of pesticides as permitted, removal of beaver dams, & removal of trash or other debris whether floating, lodged or otherwise obstructing the conveyance of water flow through channels & works.
**Maintenance** - The act of ongoing upkeep of existing structures required to keep channels in a condition adequate to support the conveyance of irrigation & drainage water (this does not include the complete replacement or substantial replacement of an existing structure). Maintenance is further defined as the care or upkeep of channels, works, appurtenances, easements, utility corridors and property; to keep in an existing state, specified state of repair, & efficiency; return to a former condition, elevation, place, & position; to preserve from failure or decline; or repair or renovate so as to return it to its original condition. Maintenance does not include dredging as defined herein.
Repair - The restoration to good or sound conditions of any part of an existing structure, channel, channel bank, or service road for the purpose of maintenance (this does not include the complete replacement or substantial replacement of an existing structure). Repair does not include dredging as defined herein.
Irrigation Guidance & MOA

GIFD permit is nothing more than a letter or notice from the local FPA to an irrigation/drainage entity documenting the activities or projects that qualify as GIFD.

Issuance of a GIFD permit requires coordination between the irrigation entity & the FPA. A GIFD permit ensures a community complies with both NFIP regulations & its own ordinances while reducing the administrative burden of permitting irrigation & drainage development activities.
Operation does not include pushing up diversions, gravel bars, or installing check dams. Cleaning does not include the removal of sedimentation (dredging). Maintenance does not include dredging as defined herein. Repair does not include dredging as defined herein.
Irrigation Guidance & MOA - RAD

Review
Assess
Document
Review: FPA reviews all irrigation & drainage entity activities or projects only within the SFHA. The FPA may meet with individual irrigation entities, or entities may submit a written description of activities to the FPA. The list of activities or projects may be annual or ongoing, & may extend up to five years.

Changes to the activities in the approved permit will require another review & additional permit.
**Assess**: FPA assesses activities & determines what level of floodplain permitting, if any, may be needed for the described activities.
**Document:** FPA sends a notice of determination to the entity advising which activities require no permit, a GIFD permit, or an individual permit. Activities that can be covered by a GIFD permit are simply noted & approved in the notice of determination. The notice of determination becomes the GIFD permit for those qualifying activities. The FPA shall maintain a copy of all proposed project activities, notice of determinations/GIFD permits, & any related documents & correspondence.
NFIP IRRIGATION and DRAINAGE PERMIT PROCESS FLOWCHART
Including Operation, Cleaning, Maintenance & Repair (OMCR) of Irrigation & Drainage Works

Irrigation Activities Proposed or Reviewed with Community FPA?

Yes

Located in SFHA or Floodway?

Yes

Assess Activity Type

No

No Review or Permit Required

New Construction, extension, or enlargement of ditches & works?

Yes

Issue Individual Permit

No

Meets OMCR* Definition?

Yes

No Permit Required (Notify entity & save docs)

No

Issue GIFD Permit (Notify entity & save docs)

NFIP Regulations Satisfied

* Refer to OCMR definitions in IDWR NFIP Irrigation and Drainage Permit Guidance
## NFIP Irrigation Permitting

<table>
<thead>
<tr>
<th>Operation, Maintenance, Cleaning, &amp; Repair</th>
<th>GIFD Permit: Activities must be permitted before work can begin.</th>
<th>Individual Floodplain Development Permit: Activities must be permitted before work can begin.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-development activities</strong>&lt;br&gt;Requires no permit</td>
<td>Development activities that can be grouped together under a common GIFD permit / low-to-no impact irrigation &amp; drainage development activities or uses in the floodplain which inherently do not increase the BFE</td>
<td>Development activities requiring an Individual Floodplain Development Permit - all other permitted activities &amp; projects within the regulatory floodway &amp; SFHA that do not meet the requirements of a GIFD permit.</td>
</tr>
<tr>
<td>a. General farming, pasture, horticultural and forestry activities that do not involve earthwork that permanently alter the topography or any clearing/grubbing of an area.</td>
<td>a. Dredging and grading of irrigation and drainage channels, when the fill from dredging or grading is not deposited on the banks of channels or anywhere within the regulatory floodway or SFHA for longer than 10 days.</td>
<td>a. fill and/or dredging (sedimentation/silt removal)</td>
</tr>
<tr>
<td>b. Grading of existing roads or easements along or near channels and within the SFHA, when the grading does not add fill within the regulatory floodway or SFHA.</td>
<td>b. Seasonal grading within natural stream channels to check or direct water into irrigation facilities (i.e. earthen “push-up dams” and “wing dams”).</td>
<td>b. new construction, or replacements that do not meet the in-kind definition;</td>
</tr>
<tr>
<td>c. Maintenance of underground utilities (work must not permanently alter topography).</td>
<td>c. Deposition of fill within the SFHA for less than 10 days. After 10 days, deposited fill must be removed from the SFHA, or graded and compacted to existing grade within ± 0.2 feet. Deposition of fill includes deposition of material resulting from grading or excavating irrigation or drainage channels. Deposition of fill within the mapped floodway requires an individual permit.</td>
<td>c. activities or projects that trigger any requirement found in the local floodplain management or NFIP regulations; and</td>
</tr>
<tr>
<td>d. In-kind replacement of existing piers or posts supporting a conforming deck.</td>
<td>d. Construction of new underground utilities that do not permanently alter the existing grade elevations by ± 0.5 feet. Excess soil from new pipes larger than 2 feet in diameter must be disposed of outside the regulatory floodway and SFHA.</td>
<td>d. activities or projects that increase flood damage and/or increase exposure to flood hazards.</td>
</tr>
</tbody>
</table>
NFIP Irrigation Permitting

<table>
<thead>
<tr>
<th>e. Activities associated with land-surface construction stormwater Best Management Practices (&quot;BMP&quot;), when the measures are temporary in nature (i.e. not in place for longer than 180 days) or do not increase the BFE. Examples of stormwater BMP activities that do not require a permit include the following: dust control; materials and equipment covers; mulching; geotextile fabrics; matting; bio-filter bags; fiber rolls; silt fences; vegetative buffer strips; temporary swales; and temporary berms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>e. In-kind replacement of irrigation and drainage works or components including but not limited to control gates or head gates, measuring devices and their housing structures/stilling wells, culverts, pumps, pipes, flumes, siphons and similar works. GIFD permits cannot authorize the In-kind replacement of dams or bridge structures.</td>
</tr>
</tbody>
</table>

| f. New installation or maintenance of non-solid fences constructed parallel to the flow of water during a flood event. Non-parallel or solid fences that block the flow will need to go through the individual permitting process. |
| f. New driveways, trails, sidewalks, roads and streets constructed completely at-or-below existing grade. |

| g. Armoring, stabilizing, securing, or in-kind replacement of existing infrastructure within the channel banks (such as bridge piers, sewer/utility supports and storm water/sewer drainage outfalls/headwalls) when the dimensions (bank slopes, channel location, channel elevation) of the channel are not altered. This should not involve replacement with larger or additional above ground infrastructure. |

*FEMA defines Development as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operations or storage of equipment and materials.*

Irrigation and drainage entities should consult their local Floodplain Administrator regarding the application and review process for individual permits.
Irrigation Guidance & MOA

Also available:

Frequently Asked Questions (FAQ) & responses to assist FPAs & water users with implementation of the Guidance, &

A list of training opportunities to assist communities & irrigation/drainage entities with Guidance implementation.
Irrigation Guidance & MOA

IDWR encourages:
FPAs to share & discuss the Guidance with appropriate community officials & staff, including elected officials, & FPAs & irrigation entities implement this guidance immediately, or as soon as practicable.

*Implementation should not require any change to community floodplain ordinances.*
Questions?
& Contacts

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