

Smith & Mason Online Resources

Mason and Smith Valleys Irrigation Wells
Irrigation Season 2015

Search...

Tools Measurement Tools

Home Pan Zoom In Zoom Out Initial View Full Extent Previous Extent Next Extent Bookmarks Identify Freehand Line Polygon Rectangle Query Filter Search By Permit

Mason and Smith Valleys GeoCort...

Thank you for visiting Smith and Mason Valleys Online Irrigation Information Page

Total Estimated Pumpage as of 8/1/2015

Mason Valley: 39,466 AF

Smith Valley: 12,085 AF

Please select the layers tab below to begin a site specific search.

Disclaimer: This application has been developed to better locate and define the irrigation water use within these basins. All data contained herein is provisional and subject to revision at any time. For more information please contact Reed Cozens at rcozens@water.nv.gov or (775) 684-2816. Thank you.

United States Department of The Interior, Bureau of Land Management | Earthstar Geographics

Disclaimer: This application has been developed to better locate and define the irrigation water use within these basins. All data contained herein is provisional and subject to revision at any time. For more information please contact Reed Cozens at rcozens@water.nv.gov or (775) 684-2816.

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Smith & Mason Interactive Map

- This map was designed to be used in the present, in the future, and with or without a curtailment order.
- Water users are under no obligation to use it; as all legal noticing will continue to be done via statutory requirements.
- A hope exists that this map will be used to further educate and inform water users of their water rights, usage, and terms of their permits.

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Why was it developed?

- Water Rights, Totalizing Meters, Meter Readings, and Location Information have often been onerous to track & manage in this area.
- For this reason a database was created linking all of the above based upon a “Site ID”.
- Mapping software was then used to display this database info on a web map.

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Goal of the Smith & Mason Interactive Map

For NDWR

- Increase organization and efficiency in water data collection and review
- Quickly identify wells that are approaching the limits of their water rights
- Expedite the sharing of pertinent information to the water users

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Goal of this project:

For the Water Users

- Allow for quick identification of water right locations and pumpage information
- Allow for water users to compare the data collected by NDWR with their own
- Quickly identify wells that are approaching the limits of their water rights

Smith & Mason Online Resources

What Information is Available?

This online resource contains the following:

- All of the underground irrigation water rights in Smith and Mason Valleys.
 - *For each individual site: Permit No(s)., Priority Date(s), and Duty (AF)*
- Additional Details
 - *GPS Coordinates for each site*
 - *Photo image for each site*

Smith & Mason Online Resources

(cont.) What Information is Available?

This online Resources contains the following:

- Totalizing Meter Information for each site:
 - *Meter Make*
 - *Meter Serial No.*
 - *Totalizing Units*
 - *Multiplier i.e. x 1000 gallons, x 0.001 Acre-Feet*
- Meter Reading Information
 - *Date of reading*
 - *Meter reading converted to acre-foot (if required)*
 - *Actual Meter Reading as displayed on totalizer*

Smith & Mason Online Resources

(cont.) What Information is Available?

This online Resources contains the following:

- Water Usage Information
 - *The most recent estimate of use in acre-feet*
 - *Total allowable usage in acre-feet*
 - *Percent of acre-feet remaining*

Smith & Mason Online Resources

Using your web browser go to the following url: <http://water.nv.gov/>



Links | Contact Us

 State of Nevada
Division of Water Resources

Home Forms Water Rights Programs **Mapping & Data** Hearings FAQ

HOME

Our Mission

The mission of the Nevada Division of Water Resources (NDWR) is to conserve, protect, manage and enhance the State's water resources for Nevada's citizens through the appropriation and reallocation of the public waters. In addition, the Division is responsible for quantifying existing water rights; monitoring water use; distributing water in accordance with court decrees; reviewing water availability for new subdivisions and condominiums; reviewing the construction and operation of dams; appropriating geothermal water; licensing and regulating well drillers and water rights surveyors; reviewing flood control projects; monitoring water resource data and records; and providing technical assistance to the public and governmental agencies.

About Us

- Contact Information
- Frequently Asked Questions
- Organizational Chart (PDF)
- Statutory Authority
- Water Law

Publications

- General Publications

Top Viewed Pages

- Water Rights Home
- Permit Search
- Spring Valley Water Rights Hearing
- Well Log Database Query Tool
- Forms Home

Calendar of Events



Recent News

- Agenda for Workshop on Water Related Issues in Smith and Mason Valleys – August
- Pony Canyon Preliminary Order of Determination
- Walker River Meetings Presentation – July 15 & 16, 2015

Smith & Mason Online Resources

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State of Nevada Division of Water Resources

Home Forms Water Rights Programs **Mapping & Data** Hearings FAQ

MAPPING AND DATA HOME

Nevada Maps

- Basin Boundary Map – PDF 3.6 MB
- Water Resource Specialist Assignments
- Interactive Water Resource Maps**
- Hydrographic Regions
- GIS Data Downloads
- Range Maps
- Search Truckee River Maps
- Search Carson River Maps
- Static Water Levels of Nevada – 1974 – PDF 7.7 MB

Water Rights Data

- Permit Search
- Hydrographic Abstracts (Advanced Search)
- Monthly Report
- Titles Database
- Decrees / Adjudication Status
- Hydrographic Basin Summaries
- List of State Engineer's Orders
- Search State Engineer's Orders
- Search State Engineer's Rulings
- Licensed Water Right Surveyors

Top Viewed Pages

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Recent News

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Home Forms Water Rights Programs Mapping & Data Hearings FAQ

MAPPING APPLICATION LINKS

Mapping Application Links
(Silverlight Required - Not supported in Chrome)

- [Water Rights](#)
- [Adjudications](#)
- [Nevada Hydrology Data](#)
- [Mason and Smith Valleys Irrigation Wells](#)

Mobile Device Links
(HTML5 Based ... Android/iDevices)

- [Water Rights Mapping Application](#)
- [Mason and Smith Valleys Irrigation Wells](#)

<http://water.nv.gov/home/contactlist.cfm>

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The screenshot displays the 'Mason and Smith Valleys Irrigation Wells' web application for the 2015 irrigation season. The interface includes a search bar at the top right, a toolbar with navigation and measurement tools, and a layers panel on the left. The map shows a grid of sections with various colored dots representing well duty status. A yellow box highlights the legend and layer control tab.

Legend & Layer Control Tab

- Site
- More Info Needed
- 0 - 25% Duty (AF) Remaining
- 26 - 50% Duty (AF) Remaining
- 51 - 75% Duty (AF) Remaining
- 76 - 100% Duty (AF) Remaining
- PLSS
- Roads

Smith & Mason Online Resources

The screenshot displays the 'Mason and Smith Valleys Irrigation Wells' web application for the 'Irrigation Season 2015'. The interface includes a top navigation bar with a search box and a 'Sign in' button. Below this is a 'Tools' section with 'Measurement Tools' and a 'Navigation' section with 'Find Data'. The 'Tools' section contains icons for Home, Pan, Zoom In, Zoom Out, Initial View, Full Extent, Previous Extent, Next Extent, Bookmarks, Identify, Fresh hand, Line, Polygon, Rectangle, Query, and Filter. The 'Identify' tool is highlighted with a yellow circle. The 'Navigation' section includes a 'Find Data' input field. The main map area shows an aerial view of a field with a red boundary line and a yellow location pin. The sidebar on the left displays 'Identify Results (1)' for 'Site , 107 N12 E24 31BACB1', with details for 'Acre-Feet Pumped as of 8/1/2015: 128' and a 'View Well' link. The bottom of the interface features a scale bar (0 to 300ft) and a footer with the text 'United States Department of The Interior, Bureau of Land management | USDA FSA, DigitalGlobe, GeoEye, Microsoft'.

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Mason and Smith Valleys Irrigation Wells
Irrigation Season 2015

Tools Measurement Tools

Home Pan Zoom In Zoom Out Initial View Full Extent Previous Extent Next Extent Bookmarks Identify Freehand Line Polygon Rectangle Query Filter

Navigation Find Data

Identify Results (3)

- Site, 107 N12 E24 31ABCC1
Acre-Feet Pumped as of 8/1/2015: 0
[View Well](#)
- Site, 107 N12 E24 31BADA1
Acre-Feet Pumped as of 8/1/2015: 0
[View Well](#)
- Site, 107 N12 E24 31BACB1
Acre-Feet Pumped as of 8/1/2015: 128
[View Well](#)

Displaying 1 - 3 (Total: 3)

Page 1 of 1

0 150 300ft

United States Department of The Interior, Bureau of Land management | USDA FSA, DigitalGlobe, GeoEye, Microsoft

Smith & Mason Online Resources

Mason and Smith Valleys Irrigation Wells
Irrigation Season 2015

12345

108 N10 E25 01ABCD1

Tools Measurement Tools

Home Pan Zoom In Zoom Out Initial View Full Extent Previous Extent Next Extent Bookmarks Identify Freehand Line Polygon Rectangle Query Filter Search By Permit

Find a Permit

Please Enter a Permit Number to begin.

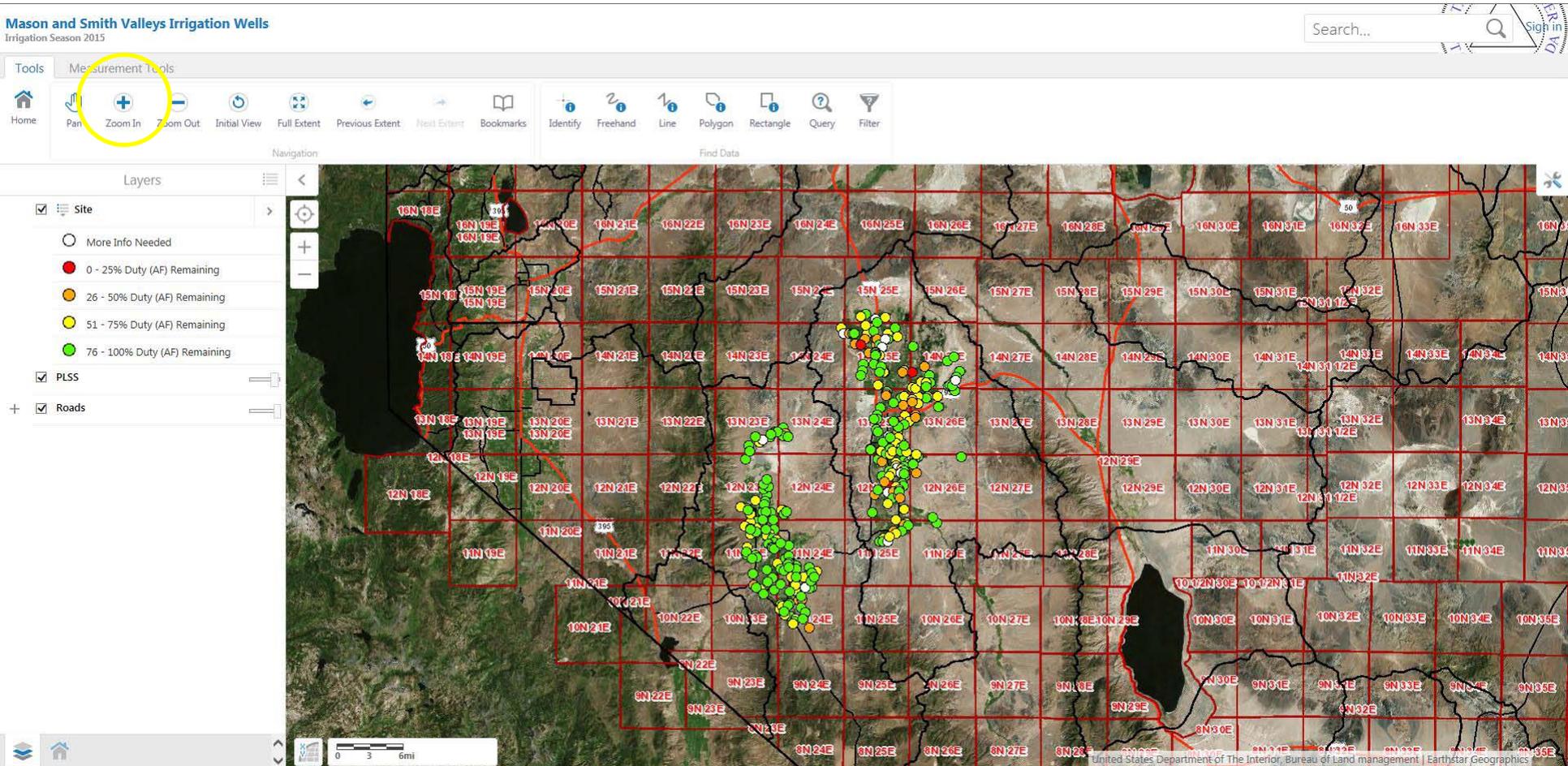
Permit #:

Search

0 300 600ft

United States Department of The Interior, Bureau of Land management | USDA FSA, DigitalGlobe, GeoEye, Microsoft, CNES/...

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Smith & Mason Online Resources

Mason and Smith Valleys Irrigation Wells
Irrigation Season 2015

Tools Measurement Tools

Home Pan Zoom In Zoom Out Initial View Full Extent Previous Extent Next Extent Bookmarks Identify Freehand Line Polygon Rectangle Query Filter

Navigation Find Data

Layers

- Site
 - More Info Needed
 - 0 - 25% Duty (AF) Remaining
 - 26 - 50% Duty (AF) Remaining
 - 51 - 75% Duty (AF) Remaining
 - 76 - 100% Duty (AF) Remaining
- PLSS
- Roads

0 150 300ft

United States Department of The Interior, Bureau of Land management | USDA FSA, DigitalGlobe, GeoEye, Microsoft

Smith & Mason Online Resources

The screenshot displays the 'Mason and Smith Valleys Irrigation Wells' interface for the 2015 irrigation season. The top navigation bar includes 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. Below this, there are links for 'Suggested Sites', 'NEATS', and 'Web Slice Gallery'. A search bar is located in the top right corner. The main interface features a toolbar with various tools categorized into 'Navigation' (Home, Pan, Zoom In, Zoom Out, Initial View, Full Extent, Previous Extent, Next Extent, Bookmarks) and 'Find Data' (Identify, Freehand, Line, Polygon, Rectangle, Query, Filter). The central map area shows an aerial view of agricultural fields with several green dots representing irrigation wells. A yellow circle highlights a specific well in the lower-middle section of the map. A scale bar in the bottom left corner shows distances up to 300 units. The bottom of the interface contains a data panel with tabs for 'Description', 'Details', 'Permit(s)', 'Meter(s)', and 'Readings'. The 'Description' tab is active, displaying the following information:

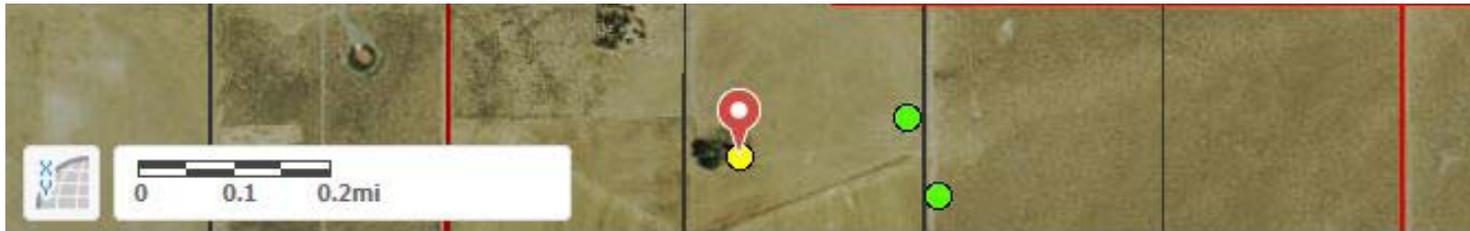
Site ID	% AF Remaining (function of pro-rata duty)
107 N12 E24 31BACB1	74.7296
Longitude NAD83	Estimated Usage (AF)
-119.342	128
Latitude NAD83	Potential Max Duty (AF)
38.865	506.52
Pro-Rata Duty (AF)	
506.52	

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Description	Details	Permit(s)	Meter(s)	Readings
Permit No. ▾	Priority Date ▾			
75186	04/16/1970			

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Description	Details	Permit(s)	Meter(s)	Readings
Meter Make ▾	Meter Serial ▾	Multiplier ▾	Units ▾	OBJECTID ▾
MCCROMETER	09-02567-10	1000	gallons	190

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Description	Details	Permit(s)	Meter(s)	Readings
Date of Reading ▾	Reading in AF ▾		Totalizer Display ▾	MeterOBJECTID ▾
03/01/2015	93.19		30366000	187
05/19/2015	98.93		32236400	187
06/16/2015	103.92		33862400	187
07/14/2015	108.6		35388600	187

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Web Map Overview

- Where to go: <http://webgis.water.nv.gov/>
- Legend
 - Colored dots represent the most recent usage as a percent remaining; based upon a pro-rata duty.
- Navigation
- Additional Site Details
- Assistance: Reed Cozens (775) 684-2816 or rcozens@water.nv.gov

Smith & Mason Online Resources

PRO-RATA DUTY VS. POTENTIAL MAXIMUM DUTY a.k.a. Permitted Duty Balance

- The following three slides show the same irrigated place of use (w/o curtailment), but with three different water right scenarios.
- These scenarios effect how and where the water may be diverted & used.
- And why and when there is a need for variable answer to “*How much water can I pump from this well?*”

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If you have one water right and one Place of Use (irrigated acreage):
The Pro-Rata Duty and Potential Maximum Duty are the same.



Irrigated Acreage: 100 acres



Water Right :
100 Acres
Maximum: 400 AF
Pro-Rata: 400 AF

Total Limit: 400 Acre-Foot for the irrigation of 100 Acres

Smith & Mason Online Resources

PRO-RATA DUTY VS. POTENTIAL MAXIMUM DUTY

If you have multiple water rights, two Places of Use (irrigated acreage), AND THE WATER RIGHTS ARE ADDITIVE:

The Pro-Rata Duty and Potential Maximum Duty are the same.

Irrigated Acreage: 100 acres



Water Right No.1 :
25 Acres
Maximum: 100 Acre-Feet
Pro-Rata: 100 Acre-Feet



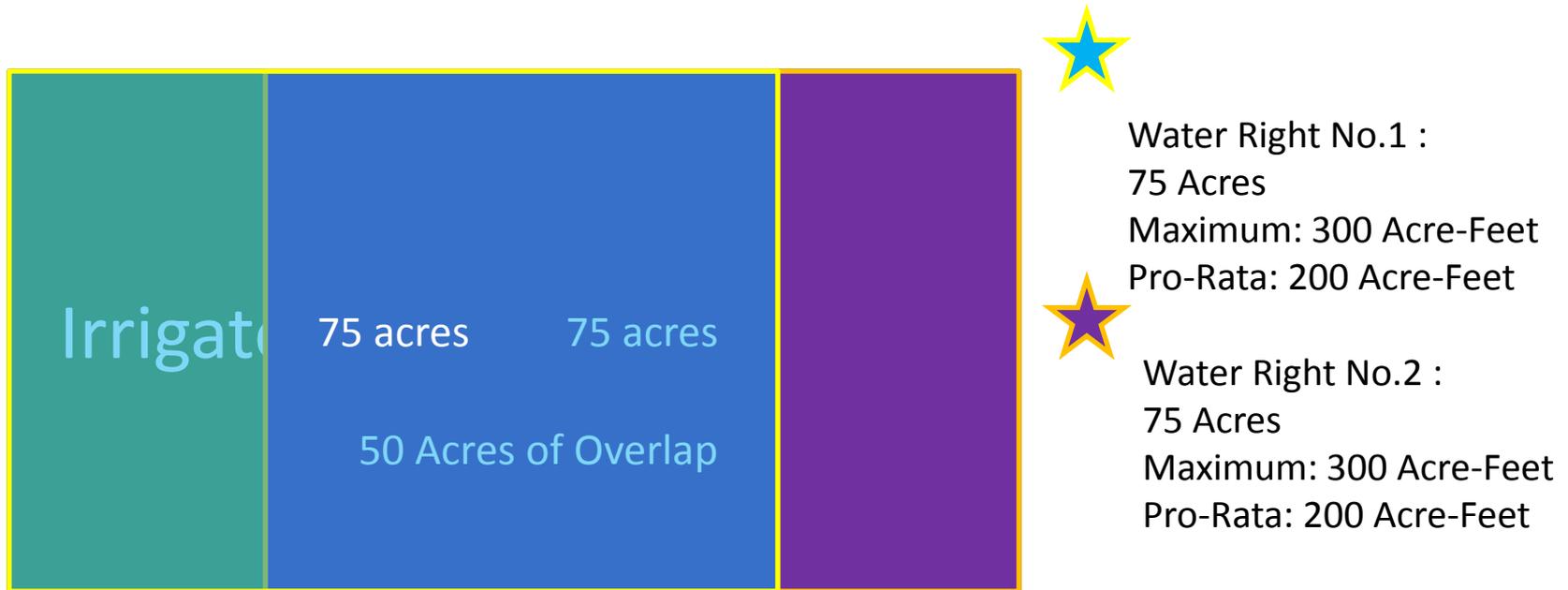
Water Right No.2 :
75 Acres
Maximum: 300 Acre-Feet
Pro-Rata: 300 Acre-Feet

Total Limit: 400 Acre-Feet for the irrigation of 100 Acres

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PRO-RATA DUTY VS. POTENTIAL MAXIMUM DUTY

If you have multiple water rights, two Places of Use (irrigated acreage), AND THE WATER RIGHTS ARE **NON-ADDITIVE**:
The Pro-Rata Duty and Potential Maximum Duty are not the same.



Total Limit: 400 Acre-Feet for the irrigation of 100 Acres

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Curtailment and Water Rights

- The following slides show the same irrigated place of use (w/ curtailment), but with three different water right scenarios.
- These scenarios effect how and where the water may be diverted & used.

Smith & Mason Online Resources

If you have one water right and one Place of Use (irrigated acreage):

Example: The curtailment priority cut-off date is 4/1/1974.



Irrigated Acreage: 100 acres



Water Right :
100 Acres
400 Acre-Feet
Priority 10/9/1972

Total Limit: 400 Acre-Feet for the irrigation of 100 Acres

Smith & Mason Online Resources

If you have one water right and one Place of Use (irrigated acreage):

Example: The curtailment priority cut-off date is 3/1/1970



Irrigated Acreage: 100 acres



Water Right :
400 Acre-Feet
Priority 10/9/1972

Total Limit: 0 Acre-Feet for the irrigation of 0 acres

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PRO-RATA DUTY VS. POTENTIAL MAXIMUM DUTY

If you have multiple water rights, one Place of Use (irrigated acreage),
AND THE WATER RIGHTS ARE ADDITIVE:

Example: The curtailment priority cut-off date is 4/1/1974



Water Right No.1 :
100 Acre-Feet
Priority Date 10/9/1972



Water Right No.2 :
300 Acre-Feet
Priority Date 7/27/1977

Total Limit : 100 Acre-Feet

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PRO-RATA DUTY VS. POTENTIAL MAXIMUM DUTY

If you have multiple water rights, one Place of Use (irrigated acreage),
AND THE WATER RIGHTS ARE **NON-ADDITIVE**:

Example: The curtailment priority cut-off date is **4/1/1974**



Water Right No.1 :
Maximum: 300 Acre-Feet
Priority Date 10/9/1972



Water Right No.2 :
Maximum: 300 Acre-Feet
Priority Date 7/27/1977

Total Limit: 300 Acre-Feet for the irrigation of 75 Acres

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- Water Rights have been applied for in different ways.
- Understanding these differences is necessary in evaluating the amount of water available to divert.
- The symbology i.e. colored dots, used in the interactive web map, may or may not be, the limit of water available to the user.
- Additional research will always be performed to ensure the water users have the full benefit of their right.