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Q: Hasn't this mapping been done before? What does this project mean to me?

A: No this type of mapping has not been done before. Currently available mapping of Newlands Project water rights is somewhat crude and has not been updated with modern mapping methods. Once this mapping project is completed, maps will become a public record of the State Engineer's Office and we plan on making them available on our website. The State Engineer anticipates that these maps will be used in the future to support change applications, hopefully making the process easier and less expensive if corrections are needed where the location of actual water use does not correspond with the mapped location of water rights. It will show you the location of where the documents indicate your water rights are really located, which means where you are allowed to use them.

Q: Who pays for the salaries for this project?

A: This project is grant funded by the United States Bureau of Reclamation through the Desert Terminal Lakes Program. The grant was awarded for \$2,380,527.00, originally to last for 5 years. Late in 2015, the grant was extended for 2 years to end September 30, 2020. No additional funding was added to the project. In June 2017, the project was awarded additional funding for administrative and Surveyor assistance, increasing the total award amount to \$2,548,763.00.

Q: When do water right owners submit any suggested corrections to the project maps?

A: Current plans are to provide an online map viewer and a Request for Revision form to be used by any water right owner who believes that his water rights have been inaccurately represented. The Request for Revision process will begin April 1, 2018, for Phases1-4. The deadline to submit the Request for Revision forms and supporting documentation will be July 2, 2018. The Request for Revision process will begin August 1, 2018, for Phase 5. The deadline to submit the Request for Revision forms and supporting documentation will be November 1, 2018. An additional review period will be provided to allow the water right owners a chance to view and comment on the changes that may have come about from the Phases 1-4 and Phase 5 Requests for Revision. This Request for Revision process will begin July 1, 2019. The deadline to submit the Request for Revision forms and supporting documentation will be September 30, 2019. The deadlines were established to allow the State Engineer adequate processing time before the grant funded project ends. Nevada Division of Water Resources will make the final determination based on a revision request as to whether the mapping will be changed. The submitter will be notified of whether or not a revision to the mapping has been made. The Request for Revision process will not be a substitute for the appropriation process defined in NRS Chapter 533 and, in some instances, a change application may be required to conform water rights to actual water use. As defined in statute, the appropriation process is available at all times, during and after the project, to change the place of use and manner of use of water rights in the Newlands Project.

Q: When will the maps be considered final? A period of time should be defined, perhaps 6 months, to provide documentation showing where mapping is incorrect and to file a change application.

A: After all Request for Revision forms have been reviewed and processed, the digital mapping product will be submitted to the State Engineer for his determination as to whether or not the product is deemed "final."

Q: Once the mapping project is completed, where do we go from here? What is the process after the project?

A: We don't know what will happen after this mapping project is completed as there currently are no plans for additional funding for a project update or for map maintenance after completion.

Q: What is the plan for updating these maps?

A: There are currently no plans to extend the project beyond September 30, 2020. The State Engineer realizes that digital, water right mapping will inevitably be in the Division of Water Resource's future and that these geospatial datasets will only remain useful as they are maintained and updated. Our current focus is to complete the project the Bureau of Reclamation asked us to do, which is to produce the most accurate and useful digital mapping of Newlands water rights that we can within the time and resources of the current project grant.

Q: What is the difference between abandonment and retirement?

A: Abandonment requires that there is intent by the water-right owner to abandon the use of the water right – intent is essential in determining abandonment of a water right. With regard to the Newlands Project, retirement refers to the AB 380 program, which was a program administered by the Carson Water Subconservancy District to purchase water rights from willing sellers for the benefit of resolving legal and administrative challenges to water rights in the Newlands Project and to acquire water rights appurtenant to 6,500 acres of land and have those rights retired and abandoned.

Q: Didn't Assembly Bill 380 address retirement and abandonment?

A: AB 380 was passed by the 1999 Legislature and it addressed the priority of a water right in a federal reclamation project, it amended 533.040 in that it states that a water right is not appurtenant to the entire farm, but to specifically identifiable lands, it defines a farm as a tract of land under the same ownership primarily used for agricultural purposes, it eliminated forfeiture of surface water rights, and it made presumptions for when an irrigation water right is not abandoned.

Q: Parts of the Newlands Project area were resurveyed in the 1970s and 1980s. Are you using the original survey monuments or recently established survey monuments? Will your mapping affect property lines?

A: We are using the more recently established survey monuments. Our water rights mapping does not affect property lines. Survey monuments are set in such a way as to perpetuate the original corner by best evidence, i.e., recorded maps, historical knowledge of locals, or other evidence. The BLM dependent resurvey monumentation protects bona fide rights and tie back to original survey corners, which means property lines are unchanged.

Q: All change application maps and property and structures maps were based on the concept of a square 40-acre, quarter-quarter section and we all know that many sections in the Newlands Project are not square 640-acre sections. How do you reconcile this discrepancy?

A: This is where we have to use some judgment, but it is backed by researched and educated decisions. We locate features that the source map was trying to depict, for example, a canal or a road, and we research to find the intent of what they meant to have done. In all cases, we

preserve the documented, water-righted acreage. We have not yet had a quarter-quarter section with more water-righted acreage than actual area. However, if a field is say 12 acres and there are 11 acres of water rights, we will only map 11 acres of water rights for that field. We are mapping what the water right records support.

Q: You indicate that you are going for a precision of 0.001 acre. How can you be that precise?

A: GIS, which stands for Geographic Information System, is powerful computer software, which has the ability to map very small details. We use GIS software to create digital maps of water rights depicting how they spatially relate to features on the ground, such as roads, ditches, canals, etc. The process of digitally drawing the outline of a feature on a map or a water-righted area is called "digitizing." The resolution that defines how small of an area we can digitize can be set within the software and is dictated primarily by the resolution of the maps and aerial photography that we use and the needs of the project. Because the smallest water-righted areas that we are asked to digitize are on the order of 0.01 acre in size, we must digitize with high precision, less than 0.01 acre, to ensure that we do not compound significant errors as the work progresses.

Q: Are you preserving water rights if, for example, a contract says there are 40 acres of water rights, but the land is actually only 39.5?

A: Yes, we are preserving documented water rights. If a transaction is documented for 40 acres of water rights, we would draw a 40 acre polygon. So far, we have not encountered a situation where the total amount of water rights exceeds the actual area within a quarter-quarter (1/16th) section.

Q: If a water-right owner has 20 acres of water rights, why can't he/she just use it wherever he/she wants?

A: Because Nevada water law requires that a water right is appurtenant to a specific place of use and because the Federal District Court in *U.S. v. Alpine*, 878 F.2d 1217 (9th Cir. 1989) ("Alpine II") said you are not allowed to irrigate properties that do not have a water right. By statute and federal court case law, you cannot use water wherever you want to. However, when a farm unit is defined through the water-right permitting process, you can define a farm unit area within which you have the right to use your water on any irrigable lands within that farm unit.

Q: What if I had 40 acres of water rights for a quarter-quarter section that was actually larger than 40 acres in size, and then I sold 20 acres of water rights and continued to irrigate 22 acres of land?

A: Our mapping project would draw a 20-acre, off delta polygon for the transaction and 20 acres of water-righted lands would remain in the quarter-quarter section. This would imply 2 acres of land remaining in the quarter-quarter section that was being irrigated without benefit of a water right; therefore, it should not be irrigated.

Q: For those that have farm units, will they be displayed accurately on the project maps?

A: Farm units will be shown on the maps; however, water right owners should still verify that they have been represented properly. Note: A Depaoli Map is another term for a Farm Unit Map.

Q: Do you review what water rights are on any particular person's deed?

A: Generally, no. We rely on the original documentation such as water right contracts and permits, etc. Deeds are not reviewed for this project except in the case of retirements.

Q: What are the "Funny Papers?"

A: The "Funny Papers" are 13 map panels dating to about 1912-14 that were made by the U.S. Reclamation Service to illustrate the locations of contracted water rights by township, range and section. They were called the "Funny Papers" because they were colorful and resembled the Sunday comics section of a newspaper.

Q: What is LIDAR?

A: With respect to the Newlands Mapping Project, LIDAR stands for <u>LIght Detection And Ranging</u> and refers to a remote sensing technology that utilizes laser light emitted from an airplane, which reflects off of the ground surface below. Data is collected that can be processed to determine detailed topographic features for an area. LIDAR survey data has value to the Newlands Mapping Project for highlighting subtle topographic features such as berms or depressions that may not be readily apparent from aerial imagery. LIDAR data can also be processed for other uses such as for creating contour and elevation models, for depicting forest cover, etc.