

**Written Statement of John J. Entsminger
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**U. S. Senate Committee on Energy and Natural Resources
Public Lands, Forests, and Mining Subcommittee**

July 12, 2023

Chairman Cortez Masto, Ranking Member Lee and members of the Subcommittee, thank you for the opportunity to testify on S. 2042.

The Southern Nevada Water Authority (SNWA) strongly supports S. 2042 which if enacted, will not only expand the Sloan Canyon National Conservation Area (NCA), but also provide a dedicated, time-certain right-of-way needed to support our Horizon Lateral Project. The timely passage of this bill will help remedy a substantial vulnerability within our existing water transmission system and ensure the reliability of water service for Southern Nevada residents.

As Southern Nevada's wholesale water provider, the SNWA is responsible for acquiring and managing the community's regional water supplies, developing and administering regional water conservation programs, maintaining and protecting water quality, building and operating major facilities and protecting environmental resources. In short, our job is to provide safe and reliable water supplies that meet our community's current and future water resource needs. The SNWA remains focused on these tasks, which include fortifying our water transmission system to ensure we can continue to provide reliable water service under a wide range of operating conditions, from maintenance outages to emergency service interruptions.

The SNWA maintains a vast network of transmission facilities that provides reliable service to Southern Nevada's 2.3 million residents and nearly 40 million annual visitors. This system includes redundancies that enable us to isolate pipeline segments to make repairs and move water from other parts of our system, allowing for uninterrupted service to our customers. Reliability is an ongoing priority for Southern Nevada and why we support this legislation.

Project Purpose and Need

The Horizon Lateral Project, a component of this legislation, is a water infrastructure project designed to deliver 375 million gallons of water from one side of Las Vegas Valley to the other, a solution that remedies vulnerabilities within our existing water transmission system. The southern part of our community receives water exclusively from the South Valley Lateral, a lone transmission line constructed 25 years ago (See Figure 1, SNWA Transmission System). The South Valley Lateral, unlike other major components, lacks interconnections with the rest of our regional infrastructure and it is imperative that we secure the ability to shut the lateral down for maintenance or emergency situations.

The lack of redundancy within this part of our system places increased risk on our community water supplies and limits our ability to serve customers during periods of interruption. The South Valley Lateral serves approximately 1,000,000 people and 40 percent of the businesses in

the Las Vegas Valley, including the City of Henderson. A failure or disruption within this part of the system could have severe consequences for our community and pose risks to public health and economic stability.

We have received questions since the introduction of S.2042 about whether construction of the Horizon Lateral would enable SNWA to divert additional water from the Colorado River to support area growth. Let me answer this question unequivocally for the Committee. No.

Nevada's Colorado River apportionment is wholly and completely unaffected by the project and, as was the case in the early 2000s, SNWA's existing facilities have proven more than capable of diverting Nevada's entire 300,000 acre-foot apportionment. Rather, in keeping with our mission to provide a safe, reliable water supply to our purveyor members, we had our 2019 Integrated Resource Planning Citizen Advisory Committee (IRPAC) consider and make recommendations regarding the vulnerability noted above. The committee recommended the development of a new water conveyance lateral to improve system redundancy and reliability. Based on this recommendation, we added the project to our Major Construction and Capital Plan in 2020 and adjusted regional water rates in 2022 to fund this project.

Project Components

Construction of the Horizon Lateral Project will supply up to six new connections that will provide additional pathways to move water, ensuring our ability to address operational needs, respond to emergencies and provide ready and reliable service to the public. Associated facilities include approximately 35 miles of 40"- 120" diameter pipelines, seven miles of hard and/or soft rock tunneling, three pumping stations, three clear wells, two booster pump stations, one regulating reservoir, up to six rate-of-flow control stations and associated controls, communications, power and cathodic systems.

Alignment Alternatives

The SNWA began a multi-year process in 2019 to ascertain viable routes for the proposed project, analyzing 92,000 potential water pipeline segments. We screened these segments using a risk-based decision model and narrowed the results to two alternatives, a northern alternative and a southern alternative (see Figure 2, North and South Project Alignments). Both alternatives begin at the SNWA's River Mountains Water Treatment Facility and tie into existing water systems components near the Interstate 15 corridor, which bisects the Las Vegas Valley.

Southern Alignment: The southern alignment is the subject of S.2042. The route primarily crosses undeveloped land and includes approximately seven miles of subsurface tunneling beneath the Sloan Canyon National Conservation Area (NCA). Infrastructure crossing through the NCA will be at depths between 50 and 2,000 feet, with the tunnel entrance and exit both being located outside the NCA itself. As it has in the past, SNWA will work cooperatively with the Department of the Interior on a suite of environmental measures designed to minimize any/all impacts to the natural and built environment.

With exception of geotechnical borehole work, which will be performed using air-lifted equipment in a limited number of small areas that will be restored to their original condition, there will be no construction or surface area disturbance on the NCA. (See Figure 3, Geotechnical Work Approach). All other project components are outside the NCA.

Northern Alignment: The North Corridor Alternative contemplates constructing the project through a densely populated urban area in the southern portion of the Las Vegas Valley (Henderson). To install 37 miles of pipeline, construction will require multi-year street closures or lane restrictions for 13 miles within the City of Henderson and Clark County. Portions of these affected streets represent some of Southern Nevada’s busiest roadways and would significantly affect motorists and businesses along those streets for years.

Staging and construction activities along this alignment would result in park and trail system closures adjacent to excavation areas and other construction-related disruptions near homes and businesses, including noise, dust and extended-duration traffic delays (See Figures 4 and 5, McCullough Vista Park Tunnel Existing Condition and Conceptual Work Area). Planned activities within high-use roadways, intersections and other streets would necessitate significant lane reductions and temporary road closures lasting up to 40 months. Detours and other roadway activities associated with project work would impact tens of thousands of daily commuters and limit access to residential neighborhoods and business services within the vicinity (See Figures 6 and 7, St Rose Parkway Open Trench Construction – Existing Condition and Conceptual Work Area).

Necessary Alignment

After extensive study and collaboration with stakeholders in the Las Vegas Valley, we selected the southern alignment for the Horizon Lateral Project. This route minimizes impacts on the natural and built environment and community and results in an estimated cost savings of approximately \$200 million. Specifically, this alternative avoids significant construction-related impacts that include noise, dust and emissions, road detours, road closures and lane restrictions in densely populated urban areas. The SNWA can develop the project to avoid visual and surface-disturbance impacts on the NCA while protecting important cultural and environmental resources.

Construction of the Horizon Lateral along the preferred route is endorsed by the City of Henderson, Clark County Board of Commissioners, Clark County Department of Aviation, Dignity Health – St. Rose Dominican Hospitals, Henderson Chamber of Commerce, International Union of Operating Engineers Local 12, Las Vegas Asian Chamber of Commerce, Las Vegas Global Economic Alliance, Latin Chamber of Commerce – Nevada, LiUna! Laborers’ Local No. 872, Nevada Governor’s Office of Economic Development, Nevada Resort Association, Nevada State AFL-CIO, Regional Transportation Commission of Southern Nevada, Retail Association of Nevada, Southern Nevada Home Builders Association, Teamsters Local 631 and Vegas Chamber. These parties recognize that significant impacts associated with the northern alternative will cause major disruptions for residents and businesses and support SNWA’s planned approach to constructing the project with no visual surface-level impacts to the NCA.

Federal Coordination

The Bureau of Land Management (BLM) and Bureau of Reclamation manage the land where this project is proposed. The BLM has told us that permitting a right-of-way under the NCA for the water pipeline is outside the scope of its authority. That is why we are seeking your support to move the project forward through the passage of this legislation.

The legislation allows for the environmental evaluation process the lead agency—presumably the BLM—chooses to apply. The agency will follow its process to evaluate the right-of-way grant and use its statutory authorities, previously provided by Congress, to develop appropriate environmental protection mitigation measures, terms and conditions. Those authorities include Federal Land Policy and Management Act requirements for environmentally protective terms and conditions in right-of-way grants and BLM’s right-of-way regulations.

Tunneling Experience

The SNWA has completed numerous critical and complex tunneling projects that, like the Horizon Lateral, were necessary to increase reliability and operational redundancy within the regional water system. Recent projects include Lake Mead Intake No. 3, which was put into service in 2015 and the new Low Lake Level Pumping Station, which was put into full-time operations in 2022.

Lake Mead Intake No. 3: This project is the most technically challenging tunneling project of its kind. It involved the construction of tunnel access shaft, Tunnel Boring Machine assembly chamber and a 24-foot diameter, three-mile-long intake tunnel beneath Lake Mead that connects to a new raw water intake structure constructed in Lake Mead. The project was constructed under pressures up to 14 bar.

Low Lake Level Pumping Station (L3PS): This project allows for use of Intake No. 3 under low lake level conditions. Lake Mead Intake No. 3’s tunnel feeds 34 vertical underground pumping shafts, each capable of producing 30 million gallons of water per day.

Together, these projects protect the SNWA’s ability to access, treat and deliver the state’s contracted Colorado River allocation under low lake level conditions. Both projects were completed on federal land, within the Lake Mead National Recreation Area, in full compliance with the terms and conditions of associated rights-of-way and environmental commitments.

Other major SNWA tunneling projects include construction of Intake No. 1, River Mountains Tunnel No. 2 and the Intake No. 2 Connection.

Ongoing Commitment to Conservation and Responsible Water Resource Management.

Finally, anytime I appear before this Committee, I believe it is important to reaffirm that since its inception in 1991, the SNWA and its member agencies have worked collaboratively to set and achieve aggressive water conservation goals. These efforts have reduced per capita water use in our community by 48 percent since 2002, and, remarkably, reduced our overall water consumption by 31 percent even as our service area population increased by more than 800,000 people.

Our agency, its employees and our community recognize the paramount importance of continued conservation within our service area and throughout the Colorado River Basin. Achievement of our current conservation goal is a top priority that underpins our long-term water resource planning efforts, an effort that will require significant and sustained effort from all sectors of our community.

The SNWA remains committed to achieving our conservation goal, managing Southern Nevada water resources responsibly and collaborating with our partners in the river community to develop long-term sustainable solutions to address current water resource challenges. We have demonstrated leadership, innovation and resolve since the onset of drought, participating in creative solutions and implementing leading-edge programs, policies and initiatives, many of which have been emulated in other water-challenged communities throughout the Colorado River Basin and beyond.

Closing Remarks

The SNWA works diligently to be a good partner with the community and a responsible steward of the environment. Construction of the Horizon Lateral as described in my testimony and detailed in S.2042, is an appropriate solution that will minimize construction-related impacts on the community and improve regional transmission reliability while fully protecting important cultural and environmental resources contained within the NCA.

I urge you to support this crucial legislation that will help ensure Southern Nevada's water supply infrastructure is resilient and reliable, and capable of meeting our near and long-term needs.

Thank you again for your invitation to testify at today's hearing. I look forward to answering any questions you might have.

Figure 1: SNWA Transmission System Showing South Valley Lateral (No Redundancy)

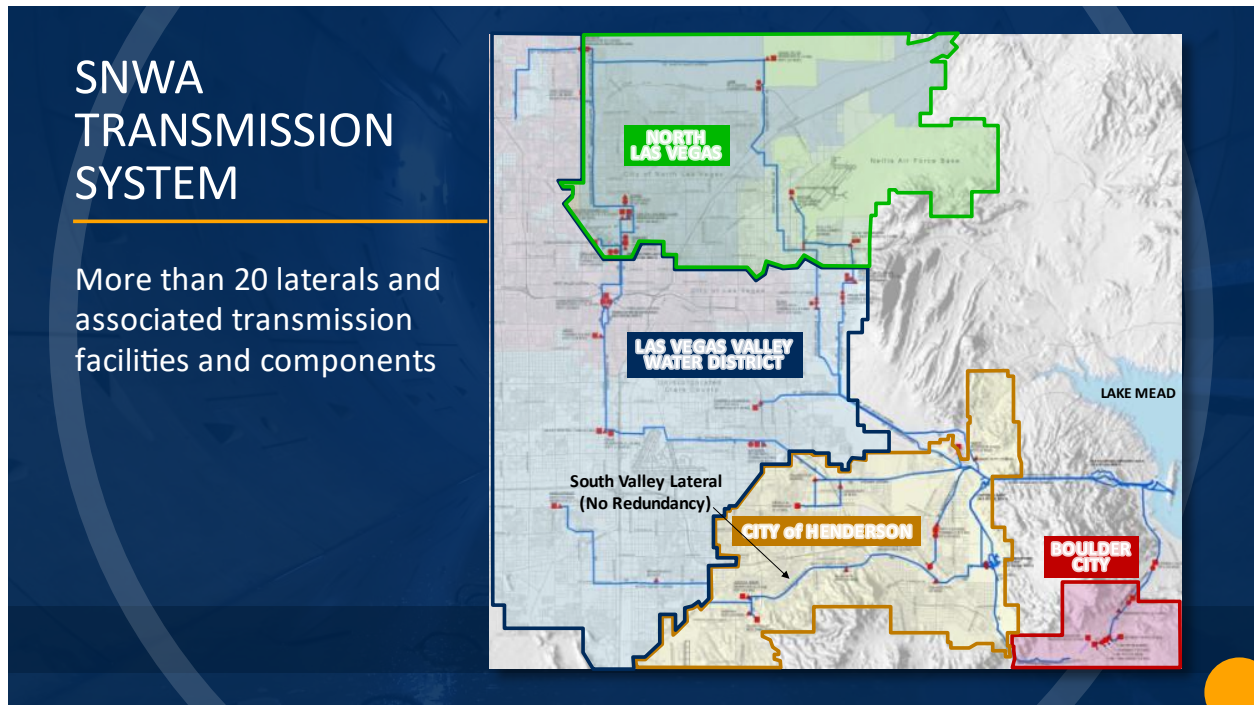


Figure 2: North and South Project Alignments

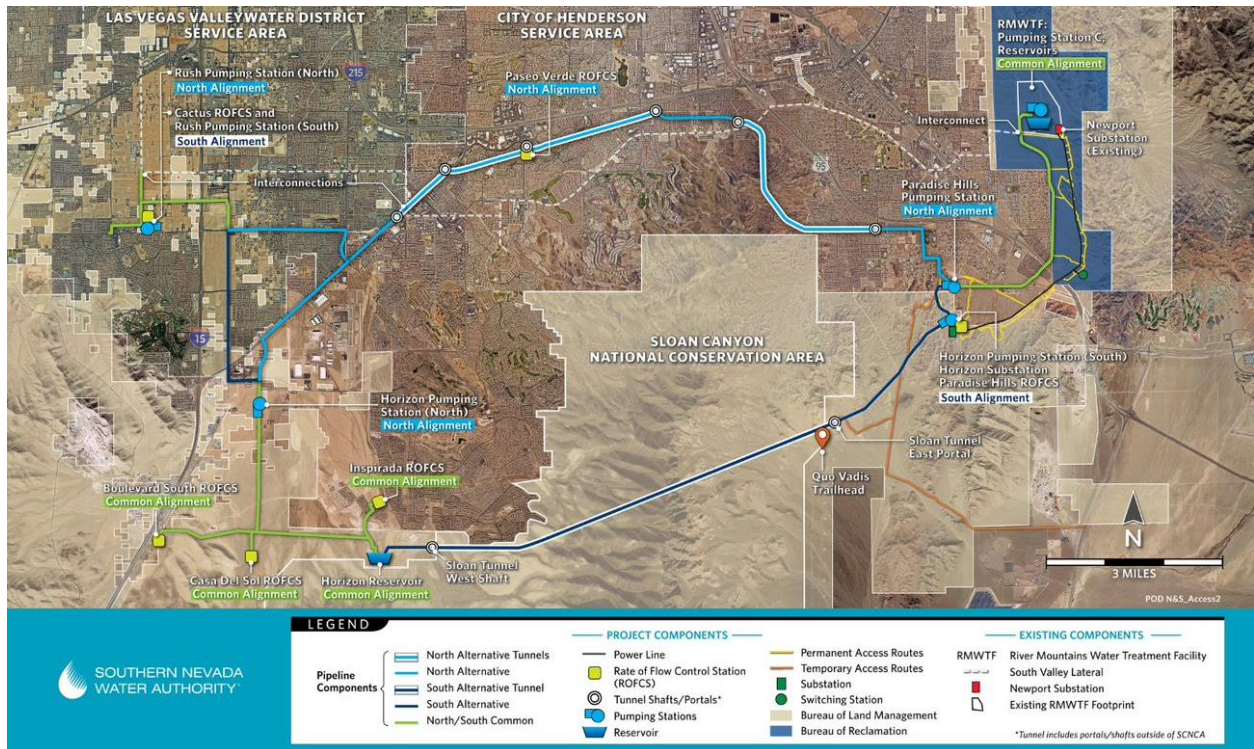


Figure 3: Geotechnical Work Approach



Figure 4: McCullough Vista Park Launch Shaft - Existing Condition



Figure 5: Mucullough Vista Park Shaft – Conceptual Work Area



Figure 6: St Rose Parkway Open Trench Construction – Existing Condition



Figure 7: St Rose Parkway Open Trench Construction – Conceptual Work Area

