

STRATEGY 8

Incorporate collaboration, including public-private partnerships, to manage and sustain GDEs

Why this strategy is needed

Agencies that manage and restore GDEs have limited staff and funding capacity (Iftexhar et al 2016), yet management decisions and actions are needed now because all GDEs in Nevada are threatened by future climate and most have many additional stressors and threats (Saito et al. 2022a). Collaboration among agencies as well as with non-governmental and private entities may help to overcome capacity and funding barriers by mitigating some of the financial risks while incentivizing desired outcomes (Mendel and Brudney 2012; Iftexhar et al. 2016). In Florida, Higgins et al. (2007) found that collaboration between The Nature Conservancy, local, state, and federal agencies, and private landowners was effective for implementing actions to reduce or eliminate undesirable non-native species. Examples of public-private partnerships include numerous mitigation efforts, the US Forest Service's work to [improve and restore forest health in the Truckee River watershed](#), the [Watershed Restoration Initiative](#) in Utah, and several programs run through the [Natural Resource Conservation Service](#). Another tool that involves collaboration between non-federal landowners and governments to provide net conservation benefits to species is [Candidate Conservation Agreements with Assurances](#) (CCAAs). An example is the [Nevada-Utah Springsnail Conservation Agreement](#) (Springsnail Conservation Team 2020).

Examples of actions associated with this strategy

- Identify and promote incentive and disincentive programs to manage and sustain GDEs through public-private partnerships
- Implement [Candidate Conservation Agreements with Assurances \(CCAAs\)](#) to conserve GDE habitat for at-risk species
- Implement partnerships and co-management to leverage and prioritize work to manage and sustain GDEs

Challenges and considerations

Finding agreement and building and sustaining trust among partners are critical and can take time and effort, particularly where there are conflicting values (e.g., conservation as opposed to development) that must be overcome. Collaborative efforts are often born in response to either an incentive program that requires collaboration, or a crisis, and usually are successful when championed by a well-respected, long-term member of the community. In addition, neutral facilitators can help discern common ground, but can be hard to find. Buy-in from agencies may also be challenging depending on their mandates and capacities. Once established, there will still be effort and funding needed to sustain coordination. Despite these challenges, collaboration at some level (formal or informal) will likely strengthen the likelihood of success and the durability of outcomes of many other strategies.

Qualitative assessment of the effectiveness of Strategy 8's ability to reduce the impacts of each GDE stressor and threat.

STRESSOR RISK	EFFECTIVENESS
S1: Groundwater pumping status	<i>Somewhat Likely</i>
S2: Declining groundwater level trends	<i>Somewhat Likely</i>
S3: Current climate	<i>Somewhat Likely</i>
S4: Ungulate impacts	<i>Somewhat Likely</i>
S5: Non-native species presence	<i>Somewhat Likely</i>
S6: Surface diversions	<i>Somewhat Likely</i>
S7: Urbanization	
THREAT RISK	EFFECTIVENESS
T1: Appropriation status	<i>Somewhat Likely</i>
T2: Potential withdrawal proximity to GDEs	<i>Somewhat Likely</i>
T3: Future climate	<i>Somewhat Likely</i>
T4: Non-native species spread	<i>Somewhat Likely</i>
T5: Future urbanization	<i>Somewhat Likely</i>

