

**GCDAMP Knowledge Assessment: Drivers & Constraints**

Resource Topic:	Archaeological and cultural resources
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Version Date:	1/12/2017

Resource Characteristic	Driver or Constraint	Strength	Direction	Confidence	Rationale: Strength & Direction	Rationale: Confidence	Recommendations
Depositional Integrity (Arch site stability)	Water erosion	Strong	Negative Effect	High	water is a know erosive agent in the system; considerable research has been done on the relationship between water erosion and degradation of archaeological sites (see Hereford et al, Rubin et al, Thompson and Potochnick, Pederson and O'Brien)	water is a know erosive agent in the system; considerable research has been done on the relationship between water erosion and degradation of archaeological sites (see Hereford et al, Rubin et al, Thompson and Potochnick, Pederson and O'Brien)	Resume monitoring w/NPS and Tribes; expand stage elevation model for HFEs to include GLCA Reach
Depositional Integrity (Arch site stability)	Wind erosion	Strong	Negative Effect	High	wind transport is a known agent of change within the system and has been linked to archaeological site stability issues. See Sankey et al, East et al, etc.	wind transport is a known agent of change within the system and has been linked to archaeological site stability issues. See Sankey et al, East et al, etc.	Resume monitoring w/NPS and Tribes
Depositional Integrity (Arch site stability)	Sand bar erosion (versus deposition)	Strong	Negative Effect	High	availability of sand for redistribution is linked to stability of terrace deposits which hold archaeological resources; as sand supply is reduced, the ability of terraces and sand bars to rebuild is diminished. See all the same reports as listed above	availability of sand for redistribution is linked to stability of terrace deposits which hold archaeological resources; as sand supply is reduced, the ability of terraces and sand bars to rebuild is diminished. See all the same reports as listed above	Resume monitoring w/NPS and Tribes
Depositional Integrity (Arch site stability)	Vegetation encroachment	Strong	Negative Effect	High	encroachment of vegetation limits the ability of sand to be transported and stored in the higher elevations (higher terrace levels). See East, GCMRC research associate/campsite	encroachment of vegetation limits the ability of sand to be transported and stored in the higher elevations (higher terrace levels). See East, GCMRC research associate/campsite	Resume monitoring w/NPS and Tribes
Depositional Integrity (Arch site stability)	Human visitation	Moderate	Negative Effect	high	GRCA CRMP and Tribal monitoring information	visitation has the potential to affect the depositional integrity of archaeological sites by introducing trails which can lead to erosion.	Support NPS and Tribal monitoring efforts and coordination with GRCA CRMP and law enforcement patrol; integrate monitoring information with education and mitigation efforts
National Register Integrity	Displacement of feature/artifact	Moderate	Negative Effect	High	It is possible to destabilize a feature without affecting the archaeological values that are contained within the property	It is possible to destabilize a feature without affecting the archaeological values that are contained within the property	support NPS monitoring
National Register Integrity	Loss of matrix	Strong	Negative Effect	High	Once a loss of matrix is achieved, the archaeological value and information potential is also lost	Once a loss of matrix is achieved, the archaeological value and information potential is also lost	support NPS monitoring
National Register Integrity	Destruction of feature	Strong	Negative Effect	High	Once a feature is destroyed, the archaeological value and information potential is also lost	Once a feature is destroyed, the archaeological value and information potential is also lost	support NPS monitoring
National Register Integrity	Human visitation	Moderate	Negative Effect	High	GRCA CRMP and Tribal monitoring information	visitation has the potential to affect artifact location, existence and persistence; loss of artifacts, in and of themselves, as portable objects within an archaeological context, is a well established law enforcement and archaeological issue in the SW. Visitation can also affect structural integrity of historic properties through movement or destruction of original fabric	Support NPS and Tribal monitoring efforts and coordination with GRCA CRMP and law enforcement patrol; integrate monitoring information with education and mitigation efforts