1 BACKGROUND

This case study provides a cautionary example where traditional ecological knowledge (TEK) was not considered as part of a permitting agency's process.

An out-of-state resident received a septic tank permit for a location that was in a historical cemetery known to a local indigenous tribe. (Note: The property is located on an island in the southeastern U.S., but the specific location is not provided in this case study to maintain anonymity). While the cemetery is noted in the state archaeologist's paper records and is documented in the legal description of the property as "*.70 AC INCLUDES CEMETERY *," it did not appear in the state's digital, searchable archaeological database, it was not visually depicted on the county's geographic information mapping system, and the cemetery extent was not visible on aerial images.

The state's historic preservation office does not have the resources or authority to identify the locations of burials, maintain historic cemeteries, acquire cemeteries, or enforce laws protecting cemeteries. The state environmental agency tasked with issuing septic tank permits is illequipped to handle site visits prior to the installation of many septic tanks. Finally, traditional knowledge of grave sites is not normally considered during the permit process.

Although the permit process requires an applicant to submit a copy of the property's plat or deed with the application, the submitted application did not depict or make note of the cemetery, and the permit application was subsequently approved.

Quick Takeaways

- Each community is unique.
- Don't ignore red flags.
- Relevant data may not be available in digital form.
- Consult multiple sources for information.
- Develop and maintain relationships with community leaders.

These data exchange disconnects allowed for the destruction of this culturally sensitive area, including the removal of several trees, clearing of vegetation, and placement of fill to accommodate the mobile home site and the infilling of several depressions (indicative of gravesites not marked with engineered headstones) to build a new road.

2 TRADITIONAL ECOLOGICAL KNOWLEDGE INPUT

The graveyard is centuries old and has not been abandoned by the family or residents of the community. Several graves in the cemetery are marked with distinctive engineered headstones (similar to the ones depicted in Figure 1) but many are marked in the traditional ways of the tribe—with a tree, shrub, or rock. Natural vegetation is commonly allowed to subsequently grow over the graves and people unfamiliar with the tribe's funeral traditions may mistakenly assume that the engineered markers signify the extent of the cemetery. This assumption led to the defacement of burial sites, a crime study). punishable by imprisonment, fines, and civil lawsuits.

By happenstance, the chief of a tribe in the southeastern United States saw the desecration of the cemetery and alerted county council members, state authorities, environmental justice advocates, attorneys, and law enforcement to protest the illegal placement of the new mobile home in a historic cemetery. Video of the situation was also posted to social media. The chief's extensive personal and professional contacts mobilized to stop additional destruction of the graveyard.



Figure 1. Typical cemetery (not the subject of this case

Source:

https://pixnio.com/miscellaneous/tree-cemetery-monument-cr oss-grass#img_info

3 RESOLUTION

After receiving a copy of the septic tank application, which is subject to the Freedom of Information Act, the chief contacted

the owner of the mobile home. The home, similar to the one depicted in Figure 2, was moved away from the graveyard. The chief later participated in a site visit with county officials and a surveyor. Together, they flagged the burial area's boundaries using a previously completed ground penetrating radar survey of the property as a guide.

Every year, hundreds of cemeteries suffer crimes of toppled stones, graffiti, desecration of remains, and outright demolition (Ford 2016). Realizing that a long-term solution to the protection of historic sites is needed, the chief advertised to the public the fact that the county was amending its comprehensive land plan, encouraged the community to comment on the land plan, and advocated for the adoption of special county ordinances that protect tribal burial areas. This continues to be a work in progress.

4 PROCESS IMPROVEMENTS

To avoid the accidental destruction of sensitive areas during environmental permitting or remediation work, several improvements can be incorporated into short-, medium-, and long-term processes. For example:

Figure 2. Source: https://www.



Figure 2. A mobile home being prepared for transport.

Source: Andy Melton (trekkyandy),

https://www.flickr.com/photos/trekkyandy/2402946311/

- One short-term improvement project managers can pursue includes consulting multiple sources of information before issuing any notice to proceed. Data gaps are more likely to exist if only one source is referenced, e.g., a permit application. By consulting multiple sources, red flags can be identified and investigated early in the process.
- Medium- to long-term process improvements can include adding to project checklists references to state regulations that protect culturally sensitive areas. Currently, the state's septic tank permit process checklist and accompanying regulations don't require an applicant to note culturally sensitive areas on a property. A question or checkbox on the application form asking the applicant to denote grave markers, historic sites, culturally sensitive areas, etc. on the property may have averted the issuance of a septic tank permit in a cemetery.
- Project managers should develop and maintain relationships with community leaders. Community stakeholders are familiar with the local traditions, landscape, history, and other traditional knowledge of the area. As part of the systemic planning process, environmental project managers can collaborate with local stakeholders to identify issues (such as encroaching on cultural sites), thereby avoiding damage to sensitive areas.

5 REFERENCES AND ACRONYMS

The references cited in this fact sheet, and the other ITRC EDM Best Practices fact sheets, are included in one combined list that is available on the ITRC web site. The combined acronyms list is also available on the ITRC web site.