

Introduction

The National Archeological Database (NADB) was created in 1984. The primary purpose of NADB is to efficiently share archeological information about publicly sponsored investigations thereby helping to eliminate unnecessary redundancy among public agency efforts. Presently, the Archeology and Ethnography Program (AEP) of the National Park Service manages three NADB modules, one of which is the National Archeological Database, Reports module (NADB-R).

NADB-R is a bibliographic inventory of reports about archeological investigations and planning across the United States. AEP works with the State Historic Preservation Offices (SHPOs) to collect the bibliographic data recorded for each state for national access and use. The Center for Advanced Spatial Technologies (CAST) at the University of Arkansas hosts the searchable, online NADB-R database <<http://web.cast.uark.edu/other/nps/nadb/nadb.mul.html>> that currently holds approximately 240,000 bibliographic records. The majority of these records document the archeological “gray literature,” typically the unpublished and narrowly distributed reports that are hard to access by researchers, CRM contractors, and government agencies. This literature, however, provides a large share of the data on archeological sites and projects nationwide. Recently the Society for American Archaeology cited NADB and particularly NADB-Reports in its initiative for renewing national archeology. NADB-R is considered an important tool for cultural resource management efforts and an important step in reporting on archeological work.

There are gaps in the online NADB-R database because it has not been updated since 1998. The NADB-R data entry application, which was provided to the SHPOs for standardized data entry in the late 1980s, is still in the DOS operating system and has not been upgraded as computer software has advanced. Due to technological advances, reorganizations of federal programs, and limited federal and state staff, the current operational and maintenance procedures of NADB-R require reconsideration. Solutions are needed to maximize service to the historic preservation community as a whole, while recognizing current and future staffing and funding levels.

To help determine the best future directions of NADB-R, AEP staff conducted a nationwide survey of the SHPOs in the fall of 2002. The survey focused on the current bibliographic systems and procedures used by the SHPOs for recording archeological project reports related to their state. In addition, the survey asked for feedback on possible enhancements to NADB-R. Specifically, the short survey sought information about:

- The nature and description of the system used by each SHPO to collect information about archeological reports, including database application.
- The current level of knowledge and use of NADB-R by each SHPO.
- Whether the SHPOs would be willing to contribute their bibliographic records to an update of NADB-R.
- Whether the SHPOs would be willing to review a planned Access version of the NADB-R application.
- Any comments and suggestions on a possible online data entry module for NADB-R whereby CRM firms would enter the bibliographic data about contracted archeological reports and the SHPO would approve and submit online the citation.

Survey Coverage and Response

Between August and December 2002, attempts were made to contact 74 offices via telephone and/or email. These contacts included 50 SHPOs in 49 states and the District of Columbia, 12 California Information Centers (ICs), and eight U.S. territories. Four SHPOs were contacted that do not house the state's archeological records and/or site files. These institutions are not included in the survey results.

Response to the survey was excellent. Of the 70 offices reached, only ten (14%) did not respond in some fashion. Due to extreme distances and phone and email interruptions, only four of the SHPOs in the U.S. territories were able to respond. The staff member in the SHPO who responded to the survey was usually the State Historic Preservation Officer or the Deputy State Historic Preservation Officer and, in a few instances, the State Archeologist or Director.

SHPO Bibliographic Systems

Fifty-three SHPOs have an electronic bibliographic system to record approved archeological reports. However, only eight (15%) of these, use the NADB-R application or a related version in Access. They are Alabama, American Samoa, Delaware, Iowa, Kentucky, and the California ICs for Central California, Eastern California, and San Bernardino. Delaware is converting to Access and intends to use the NADB-R data standards. Forty-five SHPOs use a variety of independent database formats. The majority (63%), either use a version of Access or are converting to Access and do not follow the NADB-R data standards. The remaining seven keep track of their bibliographic records in Word or Word Perfect files, Excel spreadsheets, or GLAS, a library cataloging system.

At least one SHPO currently has their bibliographic database online. Four SHPOs are developing online access to their bibliographic database, while another is working on a grant to develop such a system. One SHPO plans to develop a web site on which bibliographic data will be accessible in the future, while another SHPO is progressing towards having CRM firms submit records online. Finally, one SHPO said that it can only provide published reports to requestors and it provides a bibliography of those reports on its web site.

Twenty-four SHPOs said their office personnel have never used the NADB-R application, which the National Park Service sent to all SHPOs in the late 1980s. A few individuals were not aware of its existence because they are new to the array of SHPO responsibilities. The reasons cited most often for not using the DOS-based NADB-R application are that it is cumbersome, it often crashes or times out, and no technical service is provided. Other reasons given include concern that the keywords are uncontrolled and not standardized, and the list of work types is too long and contains redundant values. Some SHPOs also felt that NADB-R is duplicative of the state's system, out of date, poorly conceived and executed, and disruptive in the day to day routines of SHPOs with their limited staff and time. Many SHPOs prefer regional versions of the NADB-R application tailored to their specific requirements instead of a large national system. One SHPO also mistakenly believed that NADB-R only recorded bibliographic citations about federal agency projects. (See Appendix A for responses to these concerns and other issues.)

All of the SHPOs contacted said they are interested in reviewing and testing a new version of NADB-R in Access. Three SHPOs expressed interest in and the capability to convert the DOS version of NADB-R into an Access version, but were not able to send their current application to the AEP as requested for review.

SHPO Data for NADB-R

Of the 60 SHPOs that responded to the survey, 45 (75%) said they were willing to contribute records to the NADB-R update. Since then, forty (67%) of them have sent data to be included in the update. Of the

remaining 20 SHPOs, four needed approval to send their data, and four said they will send their data later. One SHPO could send their data but preferred to map it into the standardized NADB-R fields prior to sending it to AEP. Nine are unwilling to provide data to the NADB-R update for several reasons (see below). The remaining two have been re-contacted and asked to send their records. Two noted that they have set up export routines so they will be able to send regular updates.

Of the four SHPOs in the U.S. territories that responded, all were able to provide records for the NADB-R update. American Samoa submitted both new and old records and Palau sent 400 new records. Palau and the National Park Service submitted bibliographic records for work in Micronesia. The database for the U.S. Virgin Islands is still being developed.

Based on the information collected during the survey of SHPOs, over 465,200 records of archeological reports are currently held by the SHPOs. The SHPOs indicated that there are probably well over 100,000 backlog reports that need to be entered into SHPO bibliographic systems. Since August 2002, the AEP has received over 262,000 records, including approximately 81,000 old or updated records and approximately 127,000 new ones. Combined with the 240,000 records currently in NADB-R, the online database will contain some 350,000 records once the update is completed. Not all datasets will be included in the 2004 update due to problems with converting the data into the NADB-R system.

Several SHPOs did not submit records to the NADB-R update for one or more of the following reasons:

- Needs financial assistance and leadership from the federal government to provide records.
- Does not have a bibliographic database or it is under development.
- Does not provide information to the public that may affect tribes with whom they work. Most archeological reports for activity on or near tribal land contain some information that is sensitive to tribes.
- State laws prohibit the release of archeological report information to the public.
- The NADB-R data is duplicative of the state database.

Proposed NADB-R Online Data Entry System

It has become clear in recent years that there are staffing and funding constraints at SHPO offices that prevent them from regularly updating NADB-R, despite enthusiastic use of the online database by researchers and contractors as a first step in researching the archeological gray literature. A proposal to develop an online data entry system is being considered by the AEP to facilitate the entry of up-to-date bibliographic information into NADB-R. Feedback on this proposal was sought during the survey of SHPOs.

The proposed online data entry system has two modules. CRM contractors who prepare archeological reports would use the first module. The contractor would enter standardized bibliographic information about a report that has been approved by a SHPO. This Contractor module includes new fields for an abstract and a URL to an online version of the report, if available. Fields for site location are intended to enhance use in a GIS environment by SHPOs. The second module would be used by the SHPOs to review and approve bibliographic records entered by CRM firms in the Contractor module. The system would notify the SHPO once a month about the number of records submitted for review. SHPO staff would access the SHPO module via password, review the entries, correct any problems, and, once approved, submit them to the live and publicly accessible NADB-R database. Any entries that are not approved would be deleted from the module and not submitted to the online NADB-R. Also proposed is to interface the new version of the NADB-R application in Access with the online SHPO module so the SHPO could download the submitted bibliographic records to their local database. This way SHPO staff would not have to do bibliographic data entry for every report.

Among the SHPOs contacted for the survey, nine (15%) expressed their general concurrence with the proposal. These include American Samoa, District of Columbia, Maryland, Missouri, Pennsylvania,

Palau, West Virginia, and the Northeast California IC. Nine (15%) said they support the proposal but have some reservations or issues, including Delaware, Louisiana, Maryland, Mississippi, New Jersey, North Carolina, Vermont, the U.S. Virgin Islands, and the South Coastal California IC. Thirty-six (60%) SHPOs were not in favor of the proposed data entry system. Two SHPOs are developing their own online data entry system. The remainder did not respond.

Some of the issues posed by the SHPOs who are positively inclined toward the NADB-R online data entry system include:

- The online data entry system should provide the opportunity to use locational information to integrate bibliographic information with other archeological site information on a GIS platform. Must be careful to maintain spatial cross-references when downloading a citation from the SHPO module.
- Some SHPO databases have integrated the bibliographic data with other site information, often in an Access-based application. Need to determine how to download a bibliographic citation so that it does not interfere with the non-NADB-R data fields or result in piecemeal data collection.
- The NADB-R data structure needs to be as simple as possible to keep it easy to mesh with local SHPO databases. If the NADB-R fields don't match the SHPO fields, then two systems would have to be maintained. This is not possible due to staff and financial constraints.
- Agrees with the idea of shifting more responsibility on to the CRM consultants who write the reports, but SHPOs will still have a considerable amount of work to review and authorize the NADB-R records.
- Might be a way to help track reports and provide the SHPO with information about reports that have not been filed with their offices.
- Need to help SHPOs figure out which reports the CRM contractors have entered online and are downloaded to the local SHPO system and which reports need to be entered by the SHPO.
- How will draft reports as opposed to final reports be handled?
- Not all reports are approved by the SHPO. How will reports that a SHPO does not review or approve be handled?
- How will duplicate records be handled, especially in a state like California with 12 ICs?

The majority of comments from SHPOs that are not inclined towards the NADB-R online data entry system focused on the lack of resources to adequately develop and maintain SHPO databases, in part due to staff reductions. This same reason would also affect review and approval of bibliographic records in the NADB-R database. Concern also was expressed about the need to check records for accuracy and make corrections prior to SHPO approval and submittal to the NADB-R database. Other concerns are bulleted below (see Appendix B for responses to these and other concerns):

- Several years of backlogged reports need to be entered before doing this work. Relatedly, there is a danger that agencies and consultants rely heavily on a database that isn't comprehensive or frequently updated.
- How will this system save time for staff who are already over-extended?
- Some SHPOs deal with agencies rather than CRM firms in report processing and do less approving than commenting. They do not have staff to support data entry or verification in two different, yet duplicative systems.
- Some SHPOs are heavily reliant upon fees collected for assisting government agencies and CRM firms with project planning, which is largely based upon bibliographic searches. CRM firms might only look online and not come into the SHPO office, as they are supposed to, to review all related information, especially when on tight deadlines. If this scenario were to come about, NADB-R has the potential to reduce SHPO revenues.
- Concerned about receiving multiple requests for access to reports listed in NADB-R that the SHPO would have to refuse, because the reports either have limited usefulness or access to reports is limited by state statute.
- Do not believe that CRM firms would enter standardized bibliographic data into NADB-R.

- Expect that there would be marginal benefits if there were an uneven representation of reports from CRM firms. How many firms would be willing to enter reports online? Would they enter information about a report that has been rejected by the SHPO?
- Believe federal agencies rather than contractors should populate the online data entry.
- Concerned about tribal issues related to information in archeological reports.

Current and Future Plans for NADB-R

The SHPO survey provided critical data that informed both current activities of NADB-R and future plans. These include three primary efforts: the current NADB-R update, the release of a new version of NADB-R in Access, and development of an online data entry system for NADB-R.

The current update of NADB-R is progressing very well due to the overwhelming support by the many SHPOs that provided their bibliographic data. However, although most of the datasets were submitted to AEP by the spring of 2003, the final compilation of data has not been sent to CAST at the University of Arkansas for inclusion into the online system. This is due to several reasons. First, the datasets are being cleaned up by AEP (e.g., typographic errors and difficult to interpret acronyms). Second, since only eight out of the 40 datasets used the standardized NADB-R fields, considerable mapping between fields is necessary for most datasets. A few datasets are being excluded from this update due to the complexity of the mapping process. Third, NADB-R uses keywords to help users search for reports in the online version, but there is no thesaurus of keyword terms for use by either the people doing data entry or online users. Although this is a criticism of NADB-R, no thesaurus of terms currently exists for archeological resources management that AEP could use. As a result, much effort is being expended on checking the thousands of submitted keywords for spelling errors and appropriateness.

AEP anticipates that approximately 120,000 new bibliographic records will be available after the update in 2004 for a total of approximately 350,000 records in the searchable NADB-R database. As soon as this update is completed, AEP plans to begin work on the next update.

The development of a new version of NADB-R in Access is the second activity that is progressing well. The beta version will be sent to a number of SHPOs for testing before the final version is released to all SHPOs. SHPOs that sent in a dataset for the current update will be asked to test the new application, which will include their cleaned up data that is mapped to the NADB-R standards. This way each SHPO tester will be able to see how their data maps to NADB-R, learn about the types of errors that existed in their data, and test the new version for ease of data entry.

Furthermore, several new standardized fields will be available for comment in the Access version of NADB-R. One new field is an abstract field for a short summary of the report. This field may be used for a professional summary or an abstract in a style that is less technical and designed for public outreach and education. A second new field is for a URL of the report, if it is available on the web. In such cases, all specific locational information about sites should have been removed before an archeological report is posted on the web. A third new field will allow input of digitized locational data for the archeological site or survey area mentioned in the report. Although some SHPOs might not want to use this field, it will be available to maximize the possibility of linking bibliographic information to a site on a GIS platform. Lastly, it should be noted that the keyword field will still be available in NADB-R. Due to the expense and the expertise required to create a thesaurus for keywords about cultural resources management, the AEP will not attempt to create such a thesaurus. However, a picklist of the 200 most commonly used keywords currently found in NADB-R will be provided which a SHPO can both add to and delete.

The final activity involving NADB-R upon which the SHPO survey provided input is the idea of developing an online data entry system. Although many SHPOs are not comfortable with the proposal, enough thought there was merit that AEP has decided to proceed with its development. The data entry modules will be password protected. The same set of standardized data fields that are in the new version

of NADB-R in Access will be in the online data entry system. Guidance will be issued that requests the entry only of SHPO approved reports, not drafts or unapproved reports. If either of the latter is submitted, the SHPO will have the opportunity to delete them. Upon approval and submission of a NADB-R record to the online system by a SHPO, an automated analysis will be conducted to determine if it is a duplicate record.

Most of the concerns raised by SHPOs about the proposed online data entry system focused on some aspect of the workload involved for the SHPO and lack of interest and use by the CRM firms. Therefore, once workable data entry (Contractor) and approval (SHPO) modules are developed, the system will be presented to and tested by willing volunteers from both the SHPO and CRM worlds. It is hoped that some of the SHPOs who help test the version of NADB-R in Access with their own data also will be willing to test the online data entry system. This way the ability to take a bibliographic record entered by a CRM firm and download it into the new version of NADB-R located at the SHPO can also be tested. Not only will bugs to the systems be sought, but also careful analysis of the effects on SHPO workload will be conducted.

Appendix A

One important result of the SHPO Survey was the discovery that 24 offices have never used the NADB-R application that was sent to all SHPOs in the late 1980s. A few individuals were not aware of the existence of NADB-R, mainly due to being new to their job. Many SHPOs offered observations about why they do not use NADB-R. These comments provide a forum for response by the Archeology and Ethnography Program (AEP). Each bolded statement below is the SHPO concern, which is followed by a brief answer.

The NADB-R application is too cumbersome.

The original DOS version of NADB-R was cumbersome, especially as off-the shelf, Windows-based database applications became available in the 1990s. Users of the new NADB-R version 3.0 in Access will find it easy to use, however.

The NADB-R application often crashes or times out with no technical service provided.

Occasionally, NADB-R does crash or time out, but technical service can be readily obtained by contacting Terry Childs terry_childs@nps.gov in the AEP. A network of regional NADB-R coordinators once existed to help with both technical and non-technical questions. After the reorganization of National Park Service staff in 1996, however, this active network was mostly disbanded.

NADB-R keywords are uncontrolled and not standardized.

This is true. A system of standardized keywords was highly desired during the development of NADB-R in the late 1980s. However, no adequate thesaurus of archeological terms existed that related to either cultural resources management (CRM) or the diversity of taxonomic terms for cultural areas, time periods, and artifact types across the United States. The NADB-R developers considered keywords offered in *The History and Prehistory in the National Park System and the National Historic Landmarks Program* (1987), produced by the History Division of the National Park Service. Several grant proposals were written by AEP in the mid-1990s to develop a thesaurus, but were not funded. More recently, AEP examined the possibility of using the Library of Congress' subject index for archeological and CRM terms as a thesaurus, but it was not found to be adequately thorough or easy to use for NADB-R. The *Art & Architecture Thesaurus* created by the Getty Research Institute was also considered, but it is inadequate for terms related to CRM.

Although development of NADB-R proceeded without a thesaurus, some control over the entry of keywords into the database was attempted by using eight keyword categories:

- Types of Resources and Features
- Generic Terms/Research Questions/Specialized Studies
- Archeological Taxonomic Names
- Defined Artifact Types/Material Classes
- Geographic Names or Locations
- Time Periods
- Project Name/Study Unit
- Other

These categories provide some guidance concerning types of keywords to enter about an archeological report, but they may be discontinued in the Access version of NADB-R because they are a source of confusion for some. Terry Childs <terry_childs@nps.gov> is interested in receiving additional ideas and comments on NADB-R keywords.

The list of work types is too long.

This is true. When NADB-R was first launched, only seven primary work types existed. Eighty-four additional work types were added in the early 1990s as a result of the work by the Arkansas Archaeological Survey for the *South-Central States Overview* and the *Central and Northern Plains*

Overview sponsored by the U.S. Army Corps of Engineers and the Legacy Program of the Department of Defense. Since the Arkansas Archaeological Survey was a partner in the development of NADB-R, AEP decided to offer the additional set of standardized work types to provide greater detail about the work described in an archeological report, if so desired. At this time, AEP encourages regular use of the seven primary work types and use of the additional terms only when greater detail is needed or appropriate.

Many fields either are not used or are redundant.

The primary bibliographic field in NADB-R follows the *American Antiquity* format. Each bibliographic record must contain the publication type, author(s), title, and date. Other fields contain information to help both the SHPO manager of the database and the user of the NADB-R online system find a report in the system. These fields include who submitted the report, to whom the report was submitted, where the report is filed, keywords, and work type. None of these fields are internally redundant.

NADB-R is duplicative.

If the concern is that the online version of NADB-R is duplicative of each state bibliographic database, then there is an element of truth in that statement. However, NADB-R is a national database designed to promote efficient sharing of archeological information from all states and territories rather than requiring that a researcher go to each state database to begin a research project. It is more than a sum of its parts. State boundaries were nonexistent prior to 1776 and have changed periodically since then, and archeological projects may cross state boundaries. For these reasons, archeologists, CRM firms, and students may need to find information relating to a particular subject from several SHPOs. The online NADB-R database offers an initial starting point to do that – to search for gray literature that otherwise might not be known. It provides researchers with a means to discover where reports are located that might otherwise be missed. NADB-R is definitely not meant to take the place of an on-site visit to a SHPO for detailed information. Again, NADB-R is a starting place. If we do not make information about the reports available, then it is as though the reports do not exist.

NADB-R is inadequate.

See the previous answer. The searchable NADB-R database serves as a starting point to search for gray literature that is largely unknown to the researcher. It is a useful tool to gather important information, such as publication dates, author's names, titles, and where a report is located, prior to conducting research at one or more SHPO.

NADB-R is out of date.

This is true. However, NADB-R is a cumulative database that aims to capture records of all reports over time. As the database grows, it is an important historical resource as well as a compilation of relatively recent reports. The online version of NADB-R was last updated in 1998. Updates were scheduled for at least every two years, but a lack of funding and staff prevented this from happening. Beginning in 2002, a commitment was made to fix this situation. The current update of NADB-R will be followed by an update in one year and biannually thereafter.

NADB-R is poor in concept and execution.

This is not true. The concept of NADB was widely supported in the 1980s. Congress provided funding for its start-up and early years of development. The Society for American Archaeology has endorsed it on several occasions as a vital resource for researchers and CRM contractors and an important step for professional conduct in reporting on archeological work. Notably, the early concept to capture standardized data for system-wide use is now basic to most database development.

NADB-R, however, originated before the advent of many of the latest technological advances, which facilitate the use of such a database. The new version of NADB-R in Access will soon be ready for testing by SHPOs. AEP believes that it will better meet the needs of both SHPOs and researchers.

NADB-R is disruptive to the day-to-day work of SHPOs with limited staff and time.

This is not true. Data entry to any database is an important workload that requires careful attention to detail. NADB-R was conceived as a data system designed to help SHPOs manage and make accessible information about the archeological reports they approve. Unfortunately, since AEP did not upgrade the NADB-R data entry application over the years, many SHPOs developed their own database system and did not use the NADB-R standard fields. There is justified concern that NADB-R requires data entry into a duplicative system. This is not the intention of AEP and every effort will be made to prevent this from happening.

Another concern is that online use of NADB-R by researchers, CRM firms, and students will generate additional work for SHPOs if requests for reports or access to reports increase. On the other hand, there is concern that online use of NADB-R could reduce SHPO revenues because a researcher will not visit a SHPO for more detailed work. If the searchable NADB-R database is seen as only a starting point for research, as it should be, then staff time and energy is saved when a researcher arrives at the SHPO already armed with the bibliographic citations. Revenue will not be reduced because quality research requires a visit to the SHPO.

Regional versions of NADB-R are wanted by some SHPOs.

The new version of NADB-R in Access may be adapted for regional use. SHPOs who want to develop a regional database may take advantage of the standardized fields, but also may modify the picklists to include more tightly controlled values (e.g., a strict list of relevant keywords) and may add additional fields to the application. AEP is not able to help develop regional bibliographic databases, but it can provide the NADB-R records for a particular region.

Need a version of NADB-R that is tailored for the SHPOs specific requirements, rather than trying to fit data into one large national system.

The National Park Service cannot develop individualized versions of NADB-R tailored to each SHPOs specific needs. In fact, that is the antithesis of the goal of NADB-R, which is to standardize bibliographic data on the archeological gray literature in order to increase the likelihood of it being found, used, and valued nationwide. However, the new version of NADB-R in Access will be a flexible system that may be modified to link to other SHPO databases, use its data on a GIS platform, and add additional fields. Thus, an individual SHPO may tailor it to its specific needs and requirements.

NADB-R only records federal agency projects.

This is not true. The bibliographic records in NADB-R are not limited to reports of federal projects. NADB-R contains records of archeological investigations conducted on federal, state, territorial, tribal, local, and private lands. Some records even exist about work in adjacent countries, including Canada and Mexico. Final unpublished reports, books, reports in a series, book chapters, journal articles, dissertations, meeting papers, and letter reports all may be found in NADB-R. It is meant to be a comprehensive bibliographic reference tool.

Appendix B

The survey of SHPOs concerning archeological report bibliographic systems elicited some important comments on the proposed online data entry system for NADB-Reports. Some of the concerns are similar to those addressed in Appendix A and will not be repeated here. Other reservations and issues are bolded below followed by a brief response.

SHPOs have several years of backlogged reports.

Due to budget cuts and staff reductions, many SHPOs are experiencing this problem. A growing backlog of records needing entry into the database is also a problem for NADB-R since AEP has not regularly updated the database for similar reasons. One advantage to a NADB-R online data entry system would be the ability of CRM firms to input their SHPO-approved, backlogged reports that are not yet been entered into the SHPO bibliographic database. This may relieve part of the workload of some SHPOs to do backlog data entry themselves.

NADB-R would impose extreme workload difficulties for those staffs already over-extended and under-funded, and it would not save time.

The NADB-R online data entry module has the potential, in fact, do the opposite. A CRM firm that wrote a report and knows its contents fully would be able to enter bibliographic data with ease and efficiency, thereby saving the SHPO from having to do this work. Although the SHPO would still have to review, possibly edit, and submit each record entered by a CRM firm, review is much easier than data entry. The ability to download the submitted record to the local NADB-R database used by the SHPO would also save time and resources. Also, the use of picklists for fields such as keywords and worktypes in both the data entry system and the new NADB-R database in Access would facilitate data entry.

SHPOs would have to spend a considerable amount of work reviewing and authorizing the reports submitted online by consultants.

Consultants or CR firms would only submit online the bibliographic information about a report, not the report itself. Furthermore, guidance on data entry would emphasize the need to only enter information about SHPO approved reports, not draft reports. The current SHPO process of reviewing, commenting, and/or approving an actual archeological report would not change.

What happens if a SHPO does not have time to review the bibliographic records of reports submitted online?

The current idea is that each SHPO would be notified once a month about the number of bibliographic records awaiting approval and submission into the online system. After three months, if records submitted by a CRM firm are not reviewed and submitted by a SHPO, the records would be automatically uploaded into the online NADB-R searchable database. Each record handled this way, however, would be clearly marked to indicate it was not reviewed and submitted by a SHPO.

Tribal issues are a concern.

An important tribal issue related to archeological reports is the possible disclosure of archeological site locations. This is an issue for every person concerned about the protection and preservation of archeological sites. The searchable NADB-R database does not provide any specific locational information, such as UTMs, Section, Township, or Range. The database may only be searched by state and county. The online data entry system and the NADB-R Access-based application used by SHPOs, however, do allow the entry of such locational information. This was done to facilitate linking SHPO bibliographic records to sites on a GIS platform, when desired. Reports sent to and approved by SHPOs are public record and thus available for use by those with a legitimate research need. Site location is only revealed via NADB-R or a similar bibliographic system when it is used in a SHPO office by a qualified researcher or contractor.

There may be numerous duplication problems in California since NADB-R responsibilities have been subcontracted out to 12 Information Centers (ICs).

The ICs act like individual SHPOs in other parts of the country regarding the maintenance of bibliographic information about the gray literature pertaining to their designated region. Thus, there should not be any duplication of the reports entered into NADB-R by each IC, unless an archeological investigation crossed more than one region. The ICs presumably have already worked out a process to handle this situation. Also, the CRM firms are presumably familiar with the ICs and know to whom reports must be sent for approval and subsequent entry into their bibliographic database. If this is not true, AEP needs to be notified about the correct procedures.

The word “draft” would have to be noted in titles that are entered into NADB-R until the final report is received and approved.

Guidance for the online system will state that only final reports should be entered into NADB-R. If a draft report is entered for a special reason, it must be well marked as “Draft” in the title.

Who would be responsible for correcting the errors in NADB-R?

Guidance for the online data entry system will stress that every effort should be made to enter error-free information. If any errors do occur, the SHPO will have final authority to correct them. Some additional checks also will be put in place in the NADB-R database at the University of Arkansas.

AEP may have more success in approaching agencies about online NADB-R data entry and verification.

Partnerships with the SHPOs were set up at the inception of NADB-R because of the SHPOs’ duties to review archeological activities in their state and, for many, review and approve project reports. Most SHPOs are also repositories for the gray literature reports and are where project planning and research is conducted by contractors and researchers. Although some federal agencies have a bibliographic database of their archeological reports, this information should be a duplication of the much richer information held by the SHPOs about activities on state, tribal, local, private, and federal land.

An online system needs lots of built-in safeguards.

The NADB-R online data entry system will have secure password protection so that only a limited number of registrants may access the system. The database managers will have some ability to monitor use to make sure that no unauthorized users are in the system. Site locational information entered online only for SHPO use will be carefully guarded and monitored. No locational information other than state and county will be available on the public, searchable NADB-R database.

It is doubtful that CRM firms will enter bibliographic data into NADB-R. Expect there will be marginal benefits if there is an uneven representation of reports from CRM firms. How many firms would be willing to enter reports online? Will they enter information about a report that has been rejected by the SHPO?

AEP staff members have talked to staff at some CRM firms about the idea of an online data entry system for NADB-R, including a discussion at the 2003 American Cultural Resources Association (ACRA) annual conference. In general, there has been enthusiastic response to the idea. Of course, there are many small firms, including ones with only one or two employees, which may not be able to do this work due to various constraints. Thus, there will be uneven representation of CRM firms. Although SHPOs will have to fill in the gaps, hopefully this will involve much less data entry for the SHPOs when all the system components are in place. Also, AEP intends to work closely with organizations such as ACRA, the Society for American Archeology, and the Register of Professional Archaeologists, to advocate the benefits of doing the online data entry of SHPO approved reports. For the CRM firms, it will make the results of research efforts better known to other firms and to government agencies, which will minimize future duplication of effort. For the SHPOs, it will reduce

their NADB-R workload and free up time for other duties. Guidance for the NADB-R data entry system will explicitly say to only enter reports that have already been approved by a SHPO.

Minor or negative surveys should not be in NADB-R. These are considered difficult and repetitive for consultants.

The goal of NADB-R is to provide basic information about as much of the archeological gray literature in the United States as possible. This is done to eliminate unnecessary redundancy in planning and performing archeological activities (e.g., redoing work in an area because previous work was unknown) and to efficiently share archeological information. The gray literature includes letter reports, minor survey reports, and negative survey reports, as well as dissertations, Masters theses, and conference papers. Negative survey reports are critical to inform future project planners and researchers about areas where work was completed but no archeological resources were found. If these reports are not known and accessible, the same land could be surveyed a number of times. Again, the goal of NADB-R is to provide an important first step in meeting a researcher's requirements for project planning and other needs.