

Meeting Summary
Susitna-Watana Hydroelectric Project Licensing
Social Sciences 2012/2013-2014 Study Plan Development,
April 3, 2012
AEA Project Offices, First Floor Conference Room
411 W 4th Avenue, Anchorage, AK

Attendees:

Organization	Name
AEA	Wayne Dyok
AEA	Betsy McGregor
AEA	Bruce Tiedeman
ADF&G	Joe Giefer
ADF&G/DOS	James Van Lanen
ADNR/OHA (SHPO office)	Richard Vanderhoek
BLM	Elijah Waters
DOWL HKM	Tom Middendorf
DOWL HKM	Maryellen Tuttell
McDowell Group	Donna Logan
FERC	Jesse Fernandes (by phone)
FERC	David Turner (by phone)
HDR Alaska	Tracie Krauthoefer
HDR Alaska	Alyse Roberts
Louis Berger Group	Lisa McDonald (by phone)
MWH	Kirby Gilbert
Charles Mobley & Associates	Chuck Mobley
NLUR	Pete Bowers
Natural Heritage Institute	Jan Konigsberg
NPS	Cassie Thomas
NPS consultant	Harry Williamson (by phone)
Northern Economics	Patrick Burden
Stephen Braund & Associates	Paul Lawrence
URS	Bridget Easley

A housekeeping discussion followed introductions. Kirby Gilbert (MWH) introduced the purpose of the meeting, to discuss both AEA-prepared 2012 study plans and ILP study requests.

Cassie Thomas (National Park Service) asked AEA to consider several housekeeping measures that she felt would allow the agencies to be more efficient in their participation in the study development process and their review of proposed study plans. Suggestions included:

- Making sure that all of the agencies and consultants are on the project list serve for updates and announcements.

- Having the Go-To Meeting link available on the website and listed on agendas.
- Send out an e-mail letting people know any time new material is posted on the website.
- Come up with a more consistent protocol for where things, such as study plans, are posted on the website so they are easier to find.
- Come up with a better protocol for file naming including either a version number or date so that agencies don't download materials thinking they are new if they are not.

Jan Konigsberg (Natural Heritage Institute) asked whether a list of all contractors for each study were listed on the website. Betsy McGregor (AEA) responded that a list is being prepared and will be available.

Kirby Gilbert (MWH) informed the group that FERC would release transcripts of the scoping meetings so that everyone could see what was said at each meeting. He also noted that there would be another site visit in July.

Socioeconomics

Maryellen Tuttell, AICP (DOWL HKM) introduced herself as the program manager for these studies. She introduced Pat Burden (Northern Economics) who will lead the socioeconomic studies. Maryellen (DOWL HKM) noted that she will be supported on the transportation studies by DOWL HKM staff: Tom Middendorf, aviation; Steve Noble, P.E., highways; and Dave McCourtney, P.E., railroad. Maryellen (DOWL HKM) noted that support for air quality studies would be from Harris Miller Miller and Hanson, a firm that specialized in noise and air analysis.

Pat (Northern Economics) introduced the two main components of the socioeconomic studies: Social Conditions and Public Goods & Services, and Regional Economics. Pat (Northern Economics) reviewed the goals of the study and noted that the Social Conditions and Public Goods & Services study will be focused more on communities and boroughs in proximity to the project site. He noted that any local, borough or state-adopted plans for standards of public services will be used. However in many cases no such standards have been adopted and in these cases the existing situation will be used as the standard. So, for example, if there are currently 10 police officers for every 1,000 people, the analysis will use that as the standard for police protection.

Pat (Northern Economics) discussed how the REMI model, developed by Regional Economic Models, Inc. and calibrated by Northern Economics to Alaska's economy, is proposed to be used to evaluate impacts to populations and public goods and services. Pat (Northern Economics) noted that some basic data collection would begin in 2012, but most activity in 2012 would be associated with coordinating with the Project design team and other consultants, and developing the socioeconomic study plans.

Pat (Northern Economics) then reviewed the regional economic evaluation and noted that the focus on this study will be on the communities within the Railbelt. Other communities may

need to be added if the transmission lines are extended into areas outside the Railbelt. He noted that one of the standards that would be used is the state's adopted policy for providing 50 percent of energy from renewable sources. Existing levels would be used where no standards have been adopted, such as existing income levels, employment levels, etc.

Pat (Northern Economics) described how the future scenario would be created through development of major assumptions about the Alaska economy and how it is likely to change over time. The assumptions are based on research and interviews with key industries and have been used in several economic studies, including the one for the Alaska Gas Pipeline Project. The REMI model would again be used to evaluate the economic effects of the project, including effects from stable energy prices in the Railbelt and how that might affect business opportunities and impacts on tourism businesses. The regional economic analysis would also evaluate how stable energy costs would change disposable income in the Railbelt and what effects that would have on purchased of other goods and services. He noted that, again, most of the work on this study in 2012 would be limited to coordinating with the project design team and other consultants.

Cassie (NPS) asked whether the evaluation of public goods and services would look at the services provided by green infrastructure, as well as built infrastructure. She noted in particular the Susitna River system provides public benefits associated with flood retention and other services. Pat responded that green infrastructure was not specifically in the scope of the study but that this was an interesting concept.

Jan Konigsberg (Natural Heritage Institute) asked David Turner (Federal Energy Regulatory Commission) how FERC would use the socioeconomic information to inform the licensing process. He indicated that it seemed easier to understand how biological and other resource studies would result in license conditions, but could the license requirements also address social and economics?

David (FERC) said that FERC does look at impacts to social and economic resources and could potentially have license conditions to address these.

Cassie (NPS) asked whether the regional economic evaluation will look at multiple potential future scenarios, instead of just one.

Pat (Northern Economics) answered that the proposed study would look at two future scenarios: one that includes construction of the project and one that assumes the project is not constructed. The study would develop Reasonably Foreseeable Future Actions (RFFAs) based on interviews with key industries and others. This is how the analysis was done for Highway-2-Highway and the Knik Arm Bridge projects. The scenario without the project would be based on the Railbelt Integrated Resource Plan (RIRP) that outlines future potential power sources.

There was also discussion of the timeframe for the project. Wayne Dyok (Alaska Energy Authority) stated that if the license was issued in 2017 construction would start then and the project could be online in 2023. Pat (Northern Economics) noted that the REMI model will look out 50 years. Once you get beyond 50 years, it is hard to confidently model effects.

Jan (NHI) asked whether the analysis would consider changes in power generation in other areas and/or changes in industries. Pat (Northern Economics) answered that it would look at both. There was discussion of the potential for attracting companies that currently aren't in Alaska and have high energy demands. They may be more interested in locating in Alaska if they have a low or more reliable source/cost of power.

Cassie (NPS) asked whether a project of this magnitude could result in changes to construction material prices, such as steel, gravel, etc. This could make other construction projects in Alaska more expensive if this project drives those prices up. There was discussion of the various types of equipment and materials, and how material supplies and costs from markets in the Lower 48, such as steel, would not be impacted by this project, but that local goods and materials (such as labor and gravel) could be affected and these impacts would be evaluated.

Jan (NHI) asked that the economic analysis look at the impact on state credit and potential indirect impacts to the state's ability to fund other needed projects if they commit to funding this project. Pat (Northern Economics) noted that the modeling effort does include a fiscal model to look at fiscal impacts on the state and boroughs.

Wayne (AEA) noted that AEA is hiring a financial consultant that will develop a financial plan for how the project would be funded.

Bruce Tiedeman (AEA) stated that the Alaska Native land owners and communities are very interested in the long-term effects on them from this project. Not all the Alaska Native entities will be affected the same and not all of them have the same interests, so they can't be lumped into one group. They are very interested in coordinating on the economic studies.

Kirby (MWH) noted that he heard comments from Alaska Native groups at the Glennallen meeting and concerns about the outmigration from rural communities and its impact on school enrollment and community stability. Some people commented that the price of energy was driving the outmigration. Changes in population profiles need to be addressed.

Jan (NHI) asked why Glennallen would be affected since there was no proposed transmission connection to Glennallen in the proposed Project. There was discussion about recreation and subsistence use and other indirect cumulative effects on the Glennallen area. Ahtna Inc. owns property adjacent to the Project area. Any area that could be impacted should be in some manner, evaluated in the study.

There was discussion of social survey efforts that would be underway in various resource areas. Betsy (AEA) noted that the Susitna area communities would be surveyed in 2013 and

the Copper River communities would be surveyed in 2014 for subsistence. Tracie Krauthoefer (HDR) said that the Institute of Social and Economic Research (ISER) has had Alaska Department of Fish & Game (ADF&G) add some socioeconomic questions to the subsistence survey. Joe Giefer (ADF&G) noted that it is hard to get participation if the survey gets too long, so he wouldn't recommend adding a lot of questions to it.

There was clarification that there will be some baseline information collected and informal interviews conducted in 2012, but no actual surveys for subsistence or recreation. There was a question about why the Copper River communities were surveyed in 2014. ADF&G has recent surveys for that area; the ADF&G survey data on Susitna communities is older and needs to be updated.

Jan (NHI) asked Pat (Northern Economics) if part of the socioeconomic study was to hold public meetings to get information from the public. Pat (Northern Economics) noted that typically for this type of study there are meetings with elected officials, industry officials and others. No public meetings would be held specifically for this study, but information gathered from the scoping meetings would be incorporated. Jan (NHI) asked if Pat (Northern Economics) thought that the results would differ with or without public input. Pat (Northern Economics) did not think the results of the analysis would change.

Mike Wood (Chase resident) asked whether the transportation use of the Susitna River in winter would be evaluated. He noted that Chase is the closest community council to the project site and that most of the communities in the area are unincorporated. He has concerns about how an influx of people could affect these unincorporated areas.

Jan (NHI) noted that if the Project decreases rates, new industries could develop potentially leading to increasing energy demand. Jan (NHI) continued that increased demand would require more power, or could raise rates again. Pat (Northern Economics) said that the average price will depend on the load generated. Wayne (AEA) also noted that the study would look at how energy needs would be addressed using different resources if the power demand increases. Jan (NHI) added that as an applicant, the State needs to be straight-forward about potential power prices. The proposed Project may produce lower cost energy if demand stays the same, but not if demand increases.

Cassie (NPS) asked about where other resource economics are addressed, such as the value of recreation. She was not referring to changes in income to recreation businesses, but the value of non-cash goods, such as the enjoyment of the river. Some of these things are not as easily monetized but would likely be addressed in the recreation and aesthetic studies. Tracie (HDR) noted that ISER does have information on the value of the fisheries resource.

Bridget Easley (URS) noted that the recreation study will collect information on recreation spending.

Mike (Chase resident) added that in six weeks the river will be inundated with bear hunters. In December the Denali Highway is crowded with people getting caribou. He noted that Dallas Seavey, Jeff King and other mushers use the Denali Highway area for training.

Transportation

Maryellen (DOWL HKM) went over the goals of the transportation study, the standards that would be used for evaluating transportation and the standard methodologies for forecasting traffic levels. She again noted that transportation studies would not start in 2012, but that the team would be coordinating with the design team and the other consultants and preparing the study plans.

Cassie (NPS) noted that she had heard concerns from residents that have cabins in the Gold Creek area about whether the studies would evaluate the potential for more trespass on their lands if a new western access road is constructed. Betsy (AEA) responded that if a link to the Parks Highway is identified as a reasonably foreseeable action, it could be addressed in cumulative effects. Cassie (NPS) noted that access from the railroad could also be an issue. Maryellen (DOWL HKM) responded that the study will evaluate the effects of possible change in access and proximity to road and rail corridors.

Mike (Chase resident) stated that winter is a major travel time on the Susitna River and changes in ice conditions could impact the ability to travel and travel safety on the river.

Ron Benkert (ADF&G) stated that ADF&G would like Tier 1 fish passage culverts on any new roads. For the Denali Highway, an analysis of fish passage through the existing culverts would be needed.

Kirby (MWH) noted that the DOT&PF is evaluating road corridors. Becky Long (Coalition for Susitna Dam Alternatives) asked when the DOT&PF study would be completed. Wayne (AEA) noted that it would likely be released near the end of April.

Air Quality

Maryellen (DOWL HKM) reviewed the purpose of the air quality study, the standards that would be used and the standard methodologies for evaluating emissions. She noted the lack of existing data for the project area.

Wayne (AEA) recommended that the air analysis study plan consider the analysis conducted on the recent Eagle Mountain Pumped Storage EIS. He asked David (FERC) whether the study can use the emissions information already developed in the RIRP, or whether emissions had to be modeled all over again. David (FERC) said that he would look into this question and get back to Wayne (AEA).

Jan (NHI) asked whether the power generated by the project would replace relatively inefficient peaking units. Wayne (AEA) responded indicating that the project could do a combination two approaches, load following or base loading, but that the two approaches provide the bookends (range) of emissions reduction for the Project.

Betsy (AEA) noted that people in Fairbanks were interested in whether this Project would change air emissions in Fairbanks where they are in non-attainment for some air pollutants. Maryellen (DOWL HKM) noted that the analysis would have to look at what the various contributors to the non-attainment pollutant levels were and whether they were related to power production or to other sources, such as wood stoves or vehicles.

Cassie (NPS) asked whether the study proposed to collect baseline data for air quality. She noted that without a baseline it is hard to determine the effect on visual and aesthetics at the project site and for road construction and operation (dust). There are currently issues with dust on the Denali Highway and localized effects from wood stove smoke in the winter. Maryellen (DOWL HKM) noted that the study team will meet with EPA and DEC to determine what level of analysis they want to see for the study and to see if there is other information or other studies that might have been done in the study area.

Wayne (AEA) added that there will be discussions with the Railbelt utilities to see which units would be displaced by the Project to help in determining any Project-related emissions reduction.

Recreation & Aesthetics

Cassie (NPS) asked if the landscape characterization process and quantification of aesthetic values would include the river downstream of the proposed dam as well as changes in downstream flow patterns. Cassie (NPS) emphasized the importance of having a baseline noise assessment and the potential for impacts on the region's soundscape by increased overhead flights and helicopter usage. Further discussion about potential impacts of noise on wildlife populations and the need for a different model to assess impacts on wildlife. Tracie (HDR) asked if it would be possible to coordinate URS's noise modeling efforts with efforts to determine the impact of noise on wildlife populations, potentially expanding the noise analysis and modeling efforts.

Betsy (AEA) emphasized that the region was not a noise free environment and that a significant amount of hunting, fishing, and snow machine activities occurred in the Project area. Betsy (AEA) brought up the possibility of coordination between the aesthetic group and the river and ice processes group to the match KOPs with river monitoring sample points. This would allow for river flow data to be used to be matched with the quantification of aesthetic values of the river, especially in relation to changes in river flow patterns.

The river and ice processes group will be collecting several types of data at multiple points along the river from the reservoir to River Mile 9. This data includes river transects to

determine bathymetry, audio and video to monitor changes in river flow, LiDAR data for the project area, pressure transducers, monitoring ice formation and break up, in stream flow and ice modeling.

Cassie (NPS) asked if the road would be open to public use. If it is not open to the public, then it may be better to select a road alignment that would conceal the road and reduce aesthetic impacts to the landscape. In particular, Cassie (NPS) suggested hiding the road from hikers on Krusig Ridge. Wayne (AEA) provided insight into the steps and timeline for determine if the access road would be open to the public. He emphasized that currently there is no easy answer and that it is essentially a policy question which will require a significant amount of dialog with all stakeholders (including landowners) and an assessment of all potential alternatives (road alignments). However, he highlighted that this would be a public-use project. In addition, the road will not be open to the public during the construction period.

There was discussion on how many Key Observation Points (KOPs) will be designated and where they will be located. Louise Kling emphasized that the designation of KOPs is an evolving process and the input from all groups was welcomed. The initial list of KOPs would be based on the 1985 FERC application KOP list, but that list would be adjusted as required. Wayne (AEA) brought up the July site visit and suggested that stops at the initial KOPs could be incorporated into the visit to help everyone coordinate efforts.

Wayne (AEA) discussed the ongoing assessment of the potential configuration of transmission lines (one line verses two lines), emphasizing that it would be based on reliability, but that a two-line configuration was likely. A decision would likely be made by the end of the year with potential routes becoming more defined.

Harry Williamson (NPS) asked if there would be a less formal coordination process that would allow agency input/vetting of 2012 survey questions. Donna Logan (McDowell Group) clarified that the 2012 interviews would be informal and would be conducted in a way to allow people to express their views and perspectives, rather than a series of questions normal associated with a survey. Donna (McDowell Group) emphasized that the interviews were not aimed at collecting “data”, but rather designed to acquire impressions of the project and to gather information about who should be contacted and surveyed (prominent individuals, lodge owners, user groups, etc.) for the 2013-14 survey.

Cassie (NPS) asked how the informal trail network would be assessed and mapped and in particular, what would be the threshold for determining what the designation of “trail” versus “route” would be used. It was highlighted that current ADNR GIS layers may be inadequate and would need to be ground-truthed. They may be very out of date with many trails not shown or shown but currently abandoned. Betsy (AEA) brought up that AEA would be able to provide updated aerial photos and GIS layers showing rights of access and ownership.

Cassie (NPS) asked to ensure that trail’s official designations and numbering systems are used.

Betsy (AEA) and Kirby (MWH) discussed the ADNR and BLM data sources that would be available for general land ownership designation and how they would be used to determine the specific owners of lands within the region. Betsy (AEA) confirmed that URS was not responsible for determining land ownership within the region.

John Gangemi (ERM) discussed the flow-dependent recreation assessment that could be conducted and the need for input from the hydrology group and the need to determine what information is used by locals to determine flow rates. Cassie (NPS) asked for clarification on the unique situation in Alaska where rivers freeze over in the winter and transition from flow-dependent recreational uses to ice-dependent recreational uses. John (ERM) said that this has not been done before and that ice-dependent recreation would likely be excluded from his portion of the study.

Wayne (AEA) pointed out that for winter recreational uses it will be important to determine how the river is used and how flow patterns will influence these recreational uses. The recreation group will need to coordination with the river flow and ice modeling group and the transportation group to determine these interactions.

Mike (Chase resident) emphasized that river flow will directly affect the ice formation and how local residents will be able to use the river in the winter (moving along and across the river) and that most out-of-state recreational users come from the railroad and professional boat charters.

Cassie (NPS) brought up that records of access might exist for private landowners within the region; however, it was likely that this is a very small portion of the actual usage of the lands. There was discussion about combining recreation and subsistence surveys; however, Tracy (HDR) and Donna (McDowell Group) both agreed that this would not be the appropriate methodology. Paul Lawrence (Stephan Braund & Associates) pointed out that discussions on sport uses during subsistence interviews are generally not productive or well-received.

Cassie (NPS) said that it is important to identify river access points for recreational users and that it will be necessary to determine how sensitive each of these points are to changes in river flow regimes, vegetation and geomorphology. Amy Rosenthal (URS) suggested that an initial site-condition analysis form could be developed to record vegetation, ground cover and general conditions.

Betsy (AEA) emphasized the need to coordinate field efforts and the recreational sites should be designated at key points for flow studies. Donna (McDowell Group) also suggested that a study group be established to coordinate public contact efforts in order to minimize the number of times that individuals in the public are contacted.

Subsistence

Tracie (HDR) provided an overview of the ADF&G Division of Subsistence survey and how certain communities were selected as they are in need of updated information whereas other communities already had been surveyed recently. In addition to the ADF&G work, the HDR team would also conduct subsistence surveys in “non-subsistence” communities as defined by ADF&G Division of Subsistence that included Talkeetna. Tracy (HDR) noted her group would also be attempting to gather Traditional Environmental Knowledge (TEK) which would include information useful to help identify Traditional Cultural Properties (TCPs) in the Alaska Native communities. The discussion then transitioned into cultural resources

Cultural Resources

Pete Bowers (Northern Land Use Research) presented an overview of the cultural resource studies proposed. He noted that the current effort has been to bring data into Geographic Information System (GIS) databases from the older paper resource studies relevant to the area. He noted that the 2012 scope is limited to developing a GIS predictive model to identify areas which would need further evaluation in field studies in 2013 and 2014. He also discussed ice patch studies which evaluate resources that are found as ice melts and reveals areas that have been undisturbed for long periods of time.

Wayne (AEA) asked when a protocol for handling resources found in the field would be available. It would be nice to have it in early June so that crews in the field this summer can be trained on it. Chuck Mobley (Charles M. Mobley & Associates) asked about the best way to brief field teams and whether there is a Project Health & Safety Plan for all field staff. Wayne (AEA) indicated that this would be a good topic for the consultant coordination meeting coming up next week. Betsy (AEA) added that there will be a site logistics coordinator that will ensure field crews are aware of important information. She noted that all field crews will be staying in one location and will be coordinated through her.

Pete (NLUR) noted that more data on Alaska Native place names and on Traditional Cultural Properties (TCPs) will still need to be gathered. Jim Kari at the UAF Alaska Native Language Center has gathered a lot of information and his studies will need to be incorporated into the GIS system along with new information gathered.

Betsy (AEA) mentioned that Alaska Native entities had indicated an interest in being intricately involved during the development of the study plans for cultural resources. Bruce (AEA) confirmed this and said that holding meetings out in their regions would help illustrate that we are aware of their importance in this study process. They take a long-term view on access and use of their lands and want to be sure that long-term effects are adequately addressed.

Pete (NLUR) mentioned that there would be testing of the predictive modeling with limited field reconnaissance in 2012.

Richard Vanderhoek (Department of Natural Resources, Office of History and Archaeology) expressed concerns about timing during multi-year studies. Key information needs to be identified up front. Richard (SHPO) suggested that field reconnaissance should be broad. He also asked if the predictive model was going to be based on biological data and noted that it couldn't wait for 2-3 years to get the fish and wildlife studies. Pete (NLUR) agreed and noted that existing data would be used initially and that later modifications would incorporate any new information available.

David (FERC) asked when the Area of Potential Effect (APE) would be identified. Pete (NLUR) responded that the model will start by looking at a very broad area, but then the study area would become more refined through field surveys. Kirby (MWH) noted that the direct effects APE could be identified fairly easily based on Project information, but defining the indirect APE will require more time and could be an iterative process as more information is developed. Wayne (AEA) asked if FERC had recent guidance on the direct-impact APE versus the indirect-impact APE. David (FERC) agreed that the direct-impact APE is easy to define based on areas that would be disturbed by project activities but that the indirect APE gets much more site specific and difficult to discern. He noted that the identification of these areas would have to be coordinated with the State Historic Preservation Office (SHPO).

There was a question about whether a Programmatic Agreement (PA) could accelerate the process. Wayne (AEA) indicated that Ann Miles (FERC) would consider a PA and David (FERC) said he would follow-up. However, David (FERC) said the PA would provide agreement on how to do the studies, but wouldn't necessarily affect the level of effort to identify the APE. He is unsure how a PA would help, as compared to the normal cultural consultation process in the ILP.

Mike (Chase resident) asked what Alaska Native groups would be contacted downriver. Bruce (AEA) suggested that these would include Knik, Chickaloon, Tyonek, CIRI, and others.

Pete (NLUR) discussed survey strategies being considered for the FERC study plans; most would begin with helicopter surveys and then more intensive ground surveys in key areas to test the predictive model results.

Wayne (AEA) questioned the process for archaeological sites that may be part of the inundation zone. If an Alaska Native group does not want the area disturbed, does the site need to be surveyed and tested? Pete (NLUR) and Richard (SHPO) explained that all sites would have to be tested and evaluated because the State needs to identify what types of sites there are. Some may be preserved after flooding, others may lose their value. Wayne (AEA) noted that he wanted to be able to respect the wishes of the Alaska Native communities to the extent possible.

Betsy (AEA) asked how disagreements would be handled if land was owned by a village or regional corporation who had a different perspective on impacts than the tribal government. Pete (NLUR) noted that this is why consultation with all affected parties is critical.

Bruce (AEA) added that Alaska Native groups have their own criteria to determine cultural importance. He noted that the Project team must have respect for the sites that the tribal groups feel are important. Richard (SHPO) responded that consultation is critical to try to not disturb sites with human remains or spiritual significant. It was agreed that consultation is key. The Section 106 requirements are not just about preservation of historic resources but also include consultation, consideration, and respect for Alaska Native sensitivities.

Bruce (AEA) noted that most regional corporations have now identified cultural sites. Villages are now working to identify these sites, including TCPs, but they may not want to share this data. This information would need to be kept confidential. Richard (SHPO) noted that the SHPO has a database with confidential cultural data in it. But, people with legitimate research needs have access to the data. People need to know where resources are so that they don't damage resources accidentally. The SHPO works hard to get this information so that it can be used to review projects and prevent damage.

Kirby (MWH) noted that Pete (NLUR) should get Betsy (AEA) information on what dates access to different Alaska Native owned lands would be needed. Betsy (AEA) added that AEA has agreed to do programmatic permits for access to Alaska Native-owned lands for the Project studies. She needs dates from all groups that need access.

Pete (NLUR) talked about collection and curation. There is an agreement with the University of Alaska Fairbanks for resources found on state or federal lands. There would need to be coordination with landowners for curation of resources found on non-public lands. UAF may want an agreement with individual landowners for curation of artifacts from Alaska Native lands.

Tracie (HDR) asked about the GIS protocols and metadata standards. Betsy (AEA) responded that there were standards identified and Courtney Smith (DNR) added that there is a GIS coordination group across all disciplines that has started meeting on a weekly basis to ensure everyone is using the same protocol. Joetta Zabloutney (R2) is coordinating the list of data sets and who is collecting what so that there are not multiple parties collecting the same information. Betsy (AEA) noted that the GIS data access will be set up so that people will have access to the data they need but that access to other data, such as cultural data, can be restricted.

Pete (NLUR) asked Richard (SHPO) if SHPO will want a separate data agreement with each contractor working on this project, or whether there would be a project-specific data sharing agreement with AEA and the technical team. Richard (SHPO) responded that there will have to be control over the sharing of data so he would give this more consideration.

Betsy (AEA) noted that she was looking at disseminating confidential data to a limited number of people. There would be a data-sharing agreement that would likely include ADF&G, NLUR, HDR, Stephen Braund, DNR, etc.

Pete (NLUR) noted that it was important to have a thorough understanding ahead of time of the geographic reference levels. He noted that the volcanic ash layers and other specific layers could be used as a framework for the cultural chronology to evaluate sites. He and Richard (SHPO) agreed that it was important to be sure to identify these references early in the study and not be encountering a new soil reference type two or three years into the study. Richard (SHPO) added that a lot of data is gathered in the first season and takes all winter before it begins to mean something. Betsy (AEA) asked whether this level of information gathering was in the current scope. Pete (NLUR) said that it would be in the 2012 cost estimate. Chuck Mobley (Charles Mobley & Associates) noted that stratigraphic information that is broadly applicable is needed in several areas. Richard (SHPO) explained that areas with thicker sediments would have more data layers. The samples need to be spatially complete across the region. After discussion about the timing of re-examining site locations, this action was moved to 2012. Richard (SHPO) did not anticipate it would be labor intensive.

Wayne (AEA) asked whether stratigraphic information was already collected for the region in the 1980s. Pete (NLUR) responded that radiocarbon dating technology has advanced from what was available in the 1980s and that some of the laboratories that used to do radiocarbon dating have been discredited. Richard (SHPO) added that crews only dug to 50 cm or to certain stratigraphic layers and then stopped. Our assumptions about when humans were first present have changed since then. Pete (NLUR) noted that we now know that people have been in Alaska for more than 11,000 years. Richard (SHPO) added that some of the new technologies allow radiocarbon dating of the actual soils.

ACTION ITEMS:

- Develop protocol for handling historic resources encountered by field crews – MOBLEY/NLUR.
- Disseminate protocol for handling historic resources to field crews. – AEA
- Check with Ann Miles regarding use of a Programmatic Agreement for the project. – Wayne.
- Get Betsy information on what dates access is needed on Alaska Native lands. – ALL TECH TEAM.
- Disseminate standards on GIS – AEA.
- Determine if there will be a project data sharing agreement between AEA and OHA. – DNR OHA – AEA.
- Set up SharePoint Site with access to sensitive data limited. – AEA.