Land Management Integrated Resources Blanket Purchase Agreement

LMIR BPA

Summary of Scopes

December 16, 2025

IMPORTANT NOTES

The LMIR BPA is for nationwide use by ANY federal contracting office under the jurisdiction of the United States Federal Government.

Please reach out to sm.fs.lmirbpa@usda.gov if you have any questions!

This comprehensive document is replacing the **Project Description** found on pages 12-14 of the original solicitation (12363N23Q4023Solicitation.pdf), pages 14-16 of the amended solicitation (12363N23Q4023Solicitation-Final_Class Deviation Amendment.pdf), as well as the following attachments in the SAM.gov posting:

1. ProjectManagementScope.pdf
2. Cultural ResourceScope.pdf
3. ProfessionalServicesScope.pdf
3. LandSurveyScope.pdf
3. WildlifeSurveysScope.pdf
3. BotanicalSurveysScope.pdf
4.CommunicationsTribalLiaisonScope.pdf
5. Tech-DataScope.pdf
6. ArchitectEngScope.pdf
7. NEPA-SCOPE.pdf
8.NaturalResourcesRestorationScope.pdf

Any and all Scopes may be combined in order to cover the tasks of a Call Order.

This BPA is for Service contracts, only, and does NOT cover anything that would be required in a Construction and Architectural & Engineering (A-E) of FAR Part 36, or Timber Sale contract.

Many scopes listed below contain information specific to an agency, i.e., Forest Service, BLM or NPS. The scope descriptions are meant to be general in nature, and each call order will vary and provide more specificity depending on the agency and program requesting the requirements listed in the Call Order.

Public law, regulations, manuals, and handbooks referenced are subject to change. Any new legislation or changes to existing documentation are incorporated into the BPA by this reference. Manuals, etc. of any specific Region or Agency that are referenced are examples and not the only source of information that may be utilized for Call Orders. Additionally, the call orders may include specific Agency/Regional requirements or job descriptions to meet any work categories.

Descriptions of scopes are not all inclusive – some state this, while others do not, but there may be additional work items requested not explicitly stated. The intent of the scope descriptions is to provide some *examples* of potential specifications that may be associated with a particular scope of work. Variations or closely related tasks not specifically described here may appear on a Call Order.

AMENDMENT 6 SCOPE UPDATES

Scopes Removed:

- Architect/Engineering
  - While it was intended for preliminary planning phases only, it has been removed due to confusion about its limitations and the potential to interfere with the Brooks Act.
- Hazardous Materials
  - Too many local requirements and unknowns to remain feasible.

Scopes Adjusted or Limited to stay in accordance with Service Contract requirements:

- Geology and/or Minerals Services
  - Removed potential for requiring a Certified Engineering Geologist
- Land Mapping Services
  - Clarifying the types of surveys and that it is not applicable for anything that may be subject to the Brooks Act and A&E Contracting procedures
- Logging And Road Analysis
  - Clarifying that it is not applicable for anything that may be subject to the Brooks Act and A&E Contracting procedures.
- Logging And Transportation
  - Clarifying that it is not applicable for anything that may be subject to the Brooks Act and A&E Contracting procedures.

Scopes Added or Expanded:

- Aerial And Satellite Imaging & Assessment Services
  - Expanded to include satellite images.
- Field-Based Project Management, Logistics, Safety & Security Services
- Fuels Reduction Treatments
  - Updating Fuels Treatments to include disposal of slash and biomass using portable air curtain incinerators.
- Marine Transportation Services
- Nursery Services – General Seedling Nursery Work
- Sediment / Erosion Control and Dust Abatement
  - Expanding to include more details about dust abatement and material stabilization.
- Slash Shredding / Disposal / Hauling / Mechanized Burning (Natural Resource Restoration Scope)
  - Expanding Slash Shredding / Hauling to include disposal of slash and biomass using portable air curtain incinerators.

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Aerial and Satellite Imaging & Assessment Services

Aerial and Satellite Imaging & Assessment Services may be used to provide imagery (including but not limited to remote sensing and LiDAR) and navigation data, suitable for imaging, mapping, measuring, and monitoring. Products may include, for example, photogrammetric point clouds, digital surface models, LiDAR point clouds, orthophotos, maps, navigation data, and various topographic and spectral products and derivatives for a variety of objectives. The objective is to support all aerial platforms and sensors, and related processing, analyses, and derivatives used to measure, monitor, and map terrain, vegetation, and natural and manmade features.

The contractor may be asked to provide all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, and other items and non-personal services necessary to perform aerial or satellite survey and imagery or remote sensing,

Agencies may require aerial or satellite imagery services for direct digital acquisition of various resolutions, e.g., 5 to 200 cm resolution, various sensor arrangements, e.g., single or multi-band LiDAR, 3, 4, 7, or hyperspectral stereo imagery coverage for regions of interest to federal entities.

Four-band spectral Imagery/remote sensing acquisition may be accomplished using a digital sensor that collects four-band multi-spectral natural color (RGB) and color infrared (CIR) simultaneously.

The following are potential deliverables which may also be part of the requirements, such as a time window which represents 2 hours from solar noon, or specified lidar pulse density. and “leaf-on”, “leaf-off”, “cloud-free”, “haze-free”, or “snow-free” conditions:

- Schedule (data acquisition, data processing, data delivery).
- Proposed acquisition windows
- Proposed time window for optimal sun exposure (imagery)
- Proposed ground sample distance (GSD) of raw imagery and final deliverables
- Ground conditions (leaf-on”, “leaf-off”, “cloud-free”, “haze-free”, “snow-free”, “no standing water”, etc.”)
- Project personnel with contact information of the project and field operation manager(s) upon notice to proceed
- Proposed flight design in ESRI ArcGIS Pro readable vector file format, e.g. ESRI File Geodatabase or shapefile
- Proposed baseline lengths for aerial collection
- Calibration testing methodology(s)
- Sensor model and specifications (single sensor may be required for consistency)
- Sensor calibration reports
- Survey ground control acquisition parameters and processing protocols
- Aerial photography/remote sensing collection parameters (flying height, Scan FOV full angle, pulse rate, scanner frequency, front-lap percentage, side-lap percentage, point density etc.)
- Acquisition progress reports
- Final airplane trajectories and time stamps associated with remote sensing data
- Raw stereo imagery organized in a sensible manner and described in a metadata file
- Digital stereo orthophotos
- DTM used or orthophoto processing

- Digital photogrammetric point clouds (.laz) or surface models (.tif or .img)
- Lidar point clouds with intensity and possibly spectral information in laz format (currently, laz 1.4 R14)
- Data delivery tiles as vector files in ESRI ArcGIS Pro readable vector file format
- Metadata with projection information, post-processing software, and software parameters used
- Level of compliance with requirements for flying windows (e.g., 10AM – 2PM between May 1 and August 30)
- Data delivery on external hard drive(s) that will be retained by the federal requisitioner, including interim deliveries
- FGDC compliant metadata

Description of internal verification quality control processes:

- Data validation
- Pre-processing and accuracy check
- Field calibration and verification protocols (if applicable)
- Processing quality control
- Product delivery quality control

Aerial Seeding/Mulching/Application (Natural Resource Restoration Scope)

Aerial Seeding/Mulching Application/Project Material(s) transport. Services may include, but are not limited to:

- Helicopters, drones, and/or fixed wing aircraft for the application of dry seed
- Dry fertilizer
- Hydro-seed/mulch/fertilizer
- Grass straw and wood product mulches, compost, etc.
- Applying approved herbicides for help in controlling an assortment of introduced and/or invasive plant species.

Aerial vegetation spraying via helicopter or other aircraft for the requesting agency as defined in the Performance Work Statement (PWS). Anticipated projects might involve Ferry (helicopter) of restoration materials, equipment, and supplies into remote or inaccessible project sites or aiding post fire restoration work, such as Burned Area Emergency Response (BAER) efforts to provide soil stabilization. All appropriate Forest Service aircraft requirements will apply and would be addressed in the specific Call.

Air Quality and Smoke Management (Professional Services Scope and NEPA Scope)

Professional Services

Contractor shall be knowledgeable of federal, state, and local county air regulations pertaining mainly to open burning. This performance standard includes fluency of understanding and interpretation of Section 118 requirements of the Clean Air Act and State Implementation Plans (SIP); which include a Smoke Management Plan. Determination of potential impacts from the proposed use of prescribed fire on designated non-attainment and smoke sensitive areas must be a part of any analysis related to this work item.

The contractor shall be knowledgeable in combustion processes and emission factors associated with prescribed fire for the various vegetative and fuels found within the project area. If prescribed fire use is proposed within a SIP non- attainment area, the Contractor shall be capable of performing conformity rules determination of the impacts of the burning through modeling.

Primary emission sources to be analyzed are: Particulate Matter (PM2.5) from prescribed burning activities and fugitive dust generated from road construction, recreation use, and commercial hauling activities as well as volatile organic compound emissions resulting from oil and gas exploration and production activities.

The Contractor will determine total emissions produced by the proposed activity for each alternative displayed by the analysis. Modelling downwind impacts may be necessary if there is concern over avoiding impact of smoke to sensitive populated areas.

The Government will supply guidelines for preparing Air Quality Analysis for the project areas upon request.

NEPA

The contractor must be knowledgeable of federal, state, county, and local air regulations pertaining mainly to open burning. This includes a clear understanding of the Section 118 requirements of the Clean Air Act and State Implementation Plans (SIPs), which include Smoke Management Plans. Determination of potential impacts from the proposed use of prescribed fire on designated non-attainment and smoke sensitive areas must be a part of the analysis.

The contractor must be knowledgeable in the combustion process and emission factors associated with prescribed fire for the various vegetation and fuels found within the project area. If prescribed fire use is proposed within a SIP non-attainment area, the contractor must be capable of performing a conformity rules determination of the impacts of the burning through modeling.

The contractor must be knowledgeable of the direct and indirect impacts of air pollutants to the soil, water and vegetation of forests and rangelands.

The contractor may be tasked to analyze primary emissions and emission sources, including Particulate Matter (PM2.5) from prescribed burning activities and fugitive dust from road construction, recreation use, and commercial hauling activities, as well as volatile organic compound emissions resulting from oil and gas exploration and production activities.

The contractor may be tasked to determine total emissions produced by the proposed activity for each alternative displayed by the analysis. Modelling downwind impacts may be necessary if there is concern over avoiding impact of smoke to sensitive populated areas.

The Government will supply guidelines for the Contractor to prepare Air Quality Analysis for the project areas.

Anthropologist/Ethnographer (Cultural Resources Scope)

Ethnographic Studies

Work may include:

- Conducting interviews with Native American elders and tribal members, or other ethnic groups who may have information specific to a project area. Interviews may require field visits to particular areas of interest within a project area or geographic landscape.

- Development of reports that include oral histories, ethnographic interviews, how the landscape is regarded by tribal members or other peoples, and management recommendations based on the informant's perspective.

Professional Services that may be required:

- Anthropologist/Ethnographer
- Archaeologist/Historian
- GIS Specialist

Anthropology/Ethnography personnel may be required to meet the following minimum professional qualifications standards, but will be specified at the call level:

Ethnographer/Cultural Anthropologist

The minimum professional qualifications in ethnography or cultural anthropology are a graduate degree in anthropology with a specialization in applied cultural anthropology, or a closely related field like folklore, plus

1. A minimum of two (2) years of full-time professional experience (including at least six months of field work supervised by a professional Cultural Anthropologist) applying the theories, methods; and practices of Cultural Anthropology that enables professional judgments to be made about the identification, evaluation, documentation, registration, or treatment of historic, precontact, or traditional cultural properties; and
2. Products and activities that demonstrate the successful application of acquired proficiencies in the discipline to the practice of historic preservation.

Example of essential competencies can be found at:
https://www.nps.gov/ethnography/training/competencies_all.pdf

Bioengineering/Storm Water Treatments (Natural Resource Restoration Scope)

Projects may involve slope/soil stabilization utilizing (live stakes and fascines, live crib-walls, vegetated geo-textiles, vegetated gabion walls, vegetated riprap, vegetated rock walls, retaining walls, "stinger" plantings, etc.), stream bank restoration/stabilization/enhancement, storm water treatments including: mechanical filtration systems, bioretention, bio-filtration swales, vegetated buffer strips, sodding, settling basins, wet detention ponds, storm water wetlands, and ecology embankments for example.

Botanical Services (Botanical Surveys, NEPA, and Professional Services Scopes)

Botanical Surveys

The purpose of this BPA is to provide a pool of contractors available to accomplish botanical surveys to determine the presence or absence of target species, document and map locations and populations of target species, and provide an ecological description of the areas surveyed. Work can be on lands managed by federal agencies anywhere in the United States. Botanical surveys may include vascular plants (including rare and invasive plants), non-vascular plants (bryophytes [mosses and liverworts] and lichens), and/or fungi, for an assortment of projects in diverse ecological settings over a broad geographic area.

The products of this BPA include, but are not limited to:

1. Conduct botanical surveys according to protocol(s) for target botanical species.

2. Document and map target species when located by surveys, using GPS and field forms. Fill out appropriate forms legibly so they are able to be printed or copied.
3. Document and map areas surveyed on appropriate forms, whether or not target species were found. Forms must be filled out legibly and able to be printed or copied.
4. Provide habitat information for target species populations and areas surveyed.
5. Provide maps delineating survey routes and populations of target plant species, or GPS Tracks of survey routes with locations of target plant species.
6. Appropriately collected and annotated voucher specimens of target plant species.
7. Monumenting of verified or potential target species.
8. Provide photos of each target species showing the entire plant as well as photos showing diagnostic characteristics (see each species protocol for additional requirements), and the habitat it occurs in.
9. Written report summarizing areas surveyed and target species located/mapped. If surveys span more than one season, then annual reports will be provided. If one-season surveys, then a final report will be provided. Reports include associated species, habitat descriptions, and habitat threats/disturbances.
10. Provide GIS mapping files and include a complete list of target species per unit and their location coordinates in an excel spreadsheet. Each BPA call will specify which mapping coordinates are to be used (e.g., UTM in Datum NAD 1983, Zones 10 North or 11 North, or latitude and longitude in decimal degrees).

CONTRACTOR OBLIGATIONS (Actual Specifications will be specified in Individual Call Orders)

The contractor shall furnish everything necessary to perform the contract including, but not limited to, all labor, equipment, supervision, materials/supplies (except those materials designated as Government furnished) and incidentals necessary to perform vascular and nonvascular plant surveys in accordance with the enclosed specifications, terms and conditions. All federal and state rules and regulations will be followed as well as appropriate federal agency jurisdictional guidelines unique to each agency.

The Contractor shall be liable for all loss or damage of such Government-furnished property until completion and final acceptance of work required under this contract.

The Contractor shall provide field personnel who have experience and knowledge of the following:

a. Are proficient in the identification of target species which pertain to the type of survey being conducted.
b. Experience in proper collection techniques for voucher specimens.
c. Experience in field techniques including aerial photo, map interpretation, and floristic field observation skills. This includes the identification of vascular plant species and plant communities for the geographical area of interest (to be able to make a list of associated species).
d. Ability to document location, ecological condition, habitat, and survey routes for areas occupied by target species.

Specifically, but not necessarily all inclusive, the Contractor shall furnish:

a. Compass with azimuth and the appropriate declination setting for the geographic area.
b. Clinometer
c. Hand Lens (minimum magnification 10X).
d. GPS receiver unit, recreational grade (e.g., Garmin E-Trex at a minimum) that will be used to map each site for each target species. The GPS unit must be capable of allowing the user to select the

correct coordinate system (UTM and datum or LAT/LONG) as specified in the BPA call. Mapping accuracy shall be 30 meters or better.

e. Protective covering for original aerial photos (large "Ziploc" freezer bags).
f. As specified in the BPA call, wide-lined permanent markers for marking flagging and fine-lined permanent marking pens for marking topographical maps and/or aerial photos.
g. Appropriate technical references (i.e., plant keys and monographs) to accurately identify botanical species encountered during the inventory.
h. A digital camera with a minimum resolution of 5 mega-pixels, JPEG format.
i. Compound and dissecting microscopes and chemicals required for proper identification of target species, and packets or other appropriate containers for vouchering specimens.
j. Blank CDs or USB/thumb drive, for submitting electronic forms, maps, photos, summary report, and electronic data files.
k. Contractors must have access to a computer with an internet connection, email, and Microsoft Word and Excel programs and GIS mapping software if specified in BPA call.

REWORK (Actual Specifications will be specified in Individual Call Orders)

The Contractor will be required to rework any area or portion thereof that does not meet the terms of the contract. If the inspection reveals the need for rework, the COR will notify the Contractor immediately in writing. All reworks must be completed prior to proceeding with new areas, unless otherwise specified in the BPA call.

The following deficiencies will require rework:

a. Populations or habitats not identified;
b. Survey and/or Sighting forms not filled out completely and correctly, or do not have linking identifier to any voucher specimen and map;
c. Voucher specimen field tags not completely filled out or do not have linking identifier to any sighting form or map, or missing photos of target species and habitat.
d. Maps that do not thoroughly or accurately portray the survey route, have target species incorrectly located, are not legible, and do not have a linking identifier to any sighting forms, and voucher specimens;
e. Sites that cannot be relocated by flagging or do not have a linking identifier to any sighting forms, voucher specimens and maps
f. GIS data that is the wrong datum, not digitized correctly, unique identifier does not match data form or is missing a required attribute and;
g. Final reports that are not complete.

Unless otherwise specified in the BPA call, if work falls below minimum standards for field work (e.g., inaccurate GPS coordinates, monumenting) and documentation (e.g., maps, sighting forms, vouchers, and report), the Government will immediately notify the Contractor in writing and order improvement of the quality of future work. Reinspection after rework will be made in the same manner as the first inspection but in a different area. If the quality of future work is not raised to a satisfactory level within three consecutive workdays after receipt of notice in writing of unsatisfactory work, the Contractor's right to proceed may be terminated and the contract considered in default. Repeated failure to perform work at an acceptable performance shall also be considered reason for contract termination and default action.

DELIVERABLES/TASKS (Actual Deliverables will be specified in Individual Call Orders)

Field Work and Documentation

- BPA calls may be issued for field work between the contract award date and when the BPA is terminated. The period of performance for BPA calls will be indicated in each BPA call.
- The Contractor shall conduct surveys following the most current, established written protocols for target species. Potential survey protocols to be used in the BPA calls are available by request from the COR.
- If there is no survey protocol for the target species, surveys would be conducted using the Intuitive Controlled Survey Method. The Contractor shall survey units by walking routes that cover a representative cross section (at least 80%) of all major topographic features (slopes, draws, benches, ridges, etc.) and special habitat features (wet areas, rock outcrops, ridges, riparian areas, etc.) of each unit. In areas of high potential habitat, a more thorough and intensive survey shall be made. Two or more entries into portions of units may be needed in order to identify the target plant or fungal species likely to occur during its flowering/fruiting period.
- All field work shall be fully documented using forms provided by the government agency. In order to receive full payment, all required fields must be properly and legibly completed.
- Units where boundaries are not clearly identified on the ground shall be surveyed by approximating the boundary location from maps and photos provided by the Federal Agency.

For every survey unit, the Contractor shall:

1. Complete the appropriate Survey Field Form(s) (see Survey Field Form example, Attachment 2) as specified in the BPA call. Survey Field Form(s) must be completed whether or not target species were found and shall have a map attached that shows the approximate location of the survey routes traveled. All required fields on the form must be completed and legible. Forms will be filled out electronically or hardcopy, depending on what is specified in each BPA call.
2. Complete a list of all plant species encountered during the survey that are either in flower/fruit at the time of the survey or are readily identifiable vegetatively. Lists will be provided in an Excel spreadsheet or hard copy field form, depending on the BPA call specifications.
3. Delineate survey routes with flagging (Government-provided) or GPS tracks, depending on the BPA call specifications. If routes are to be flagged, each BPA call will specify how to hang the flagging. The following is an example of what may be required. Double strands of route flagging shall be labeled/dated and hung at the beginning and end of each route. Single strands shall be hung approximately every 100 feet along the survey line to show the survey route. When contours of the land and/or dense vegetation reduce easy visibility, flagging shall be hung at whatever intervals are needed to follow the survey lines. The survey route shall be accurately depicted on a separate topographic section map. Writing on all flagging shall be with a wide-tipped permanent black marker and note the project for which the survey is being completed, date, and surveyor's initials. The Federal Agency for which the task order is being completed shall select the appropriate color of flagging to be used to denote the survey route. If GPS tracks are used, then the tracks shall be turned "on" to record the survey routes taken.
4. Depending on the individual BPA call, the contractor may be required to provide a typed Word-compatible summary report, whether or not target species are found.
5. When a target species is found, each population will be given a unique identifier number, documented on the appropriate form(s), and may require collection of a voucher specimen,

depending on the BPA call specifications. Target plant populations shall be mapped and must be re-locatable using flagging and coordinates as specified in BPA call.

For every site, the following shall be completed by the Contractor:

1. Collect location coordinates at the site for populations of all target species and record the coordinates on the appropriate field form (e.g., see example of Element Occurrence Form, Attachment 3).
    a. The type of GPS equipment and the Datum and Zone if using UTMs shall be indicated on the site form (e.g., Trimble GeoExplorer 3, NAD83 Zone 10), as well as the accuracy level if provided on the GPS unit (e.g., accurate within 10 meters).
    b. Mapping accuracy shall be 30 meters or better.
    c. Coordinates are to be in NAD83.
    d. Depending on the BPA call, GPS the center of each target species population and/or the boundary.
    e. Shapefiles with data attribute tables and coordinates of the GPS'd populations may need to be provided to the COR along with the required forms once every two weeks, depending on the BPA call specifications.
    f. All GPS point locations will be submitted to the COR in a shapefile as polygons. Minimum polygon size is 0.1 acre.
2. <u>Each BPA call will define how to flag a site so it can be relocated</u>. Depending on the BPA call, the Contractor may be required to monument sites for voucher specimens whose taxonomic identity is not yet determined.
    - The following is an example of how a site may be required to be flagged:
    - Sites will be flagged so they can be relocated.
    - Reference trees may need to be documented on the target species sighting form.
    - *For sites less than 30 feet in diameter,* place 2 long flags as close to the center of the site as possible, but in a location where they can be easily seen from a distance.
        - If no trees or shrubs are close to the species occurrence to attach the flags to, hang them on the closest trees or shrubs within 50 feet and indicate on the flagging the azimuth and distance to the actual species location.
    - *For occurrences greater than 30 feet and less than 100 feet in diameter*, place 2 long flags in the approximate center of the site and clearly flag the perimeter of the polygon with single strands.
    - Also hang single strands of flagging close to the actual location(s) of the target plants.
    - Draw the population boundary on both the topographical map and the aerial photo.
    - GPS the center of the population and map these sites as polygons.
    - *If the occurrence is greater than 100 feet in diameter*, mark the approximate center of the population with 2 long flags and hang single strands of flagging close to the actual location(s) of the target plants.
    - Map the boundary of the population on both the topographical map and the aerial photo as a polygon, but no perimeter flagging is needed.
    - GPS each sub-population and show their locations on the topographical map. Indicate on the site form how any sub-populations were flagged within the polygon.
    - The central flagging at each target plant site shall be labeled with the plant code, date, site number, and surveyor's initials. Writing shall be from the knot down on the upper end of the flag, using a wide-tipped permanent black marker.

- Multiple sightings of the same species with a survey unit shall be clearly labeled in sequence, for example, "species, population 1, date, surveyor's initials", "species, population 2, date, surveyor's initials", etc.
- The single strands of flagging marking the actual location of the species' occurrence and at least some of the perimeter flagging should be marked with the species code and site number to help distinguish it from adjacent populations.
- Plant species codes are found in the PLANTS Database at: https://plants.usda.gov/. If a PLANTS Database species code does not exist for a non-vascular or fungal species, write enough of the scientific name for the species to be properly identified on the flagging.
- The location of the sites shall be accurately marked on an aerial photo and on a topographical map as a point or polygon, as appropriate. The species code and site number shall be used. If the site is a polygon that contains multiple patches of plants, number these sub-populations and show their locations on the map. The site number on the flagging shall match that on the site forms and the maps.
- All required data fields must be completed on the appropriate site forms. Electronic or hardcopy forms shall have a map attached that shows the location of the site.
- At least one photograph of the target species itself and one of the general habitat where it is located shall be taken after hanging the identifying flagging.
    - Each photograph shall be labeled with an Image ID number and the number recorded on the appropriate field form.
    - Photos may be submitted electronically or hardcopy once every two weeks for the corresponding site forms.

Any data, photos, findings, survey results, etc., are the property of the Government. The Government will retain the rights to use this intellectual property as needed.

- Voucher collections, if required, will be appropriately collected and annotated according to protocols for these species. Each BPA call will describe the vouchers that need to be collected. Depending on the individual BPA call, the Contractor may be required to submit vouchers to the Regional Inventory Coordinator Assistant.

REPORTS (Actual Specifications will be specified in Individual Call Orders)

The contractor shall provide one (1) hard copy and one (1) electronic copy (Microsoft Word-compatible document on a CD or USB/thumb drive) of a Report for each fungi survey season or a Final Report for one-season botanical surveys. Reports must include color copies of a map of the project area, designating the survey routes and element occurrences, areas of populations of known or potential target species, list of vouchers completed, including the dates, acres surveyed, and element occurrences found, and a summary of habitats found in the different units, including information on elevation ranges, topography (including relationship to watershed), soil types, plant communities, dominant trees, shrubs, and forbs, special habitats, apparent history (e.g., burned), and observations (e.g., presence of invasive plants, OHV impacts, etc.).

In addition to the written report(s), the Contractor will also provide:

a. An Excel spreadsheet summarizing target species locations by unit with 5 columns of information:
    i. Genus
    ii. Species specific epithet

iii. Species code (using the PLANTS database as a source for the code names; If the PLANTS database does not list the species, then a code will be entered that is the first 3 letters of the genus plus the first 3 letters of the species)
iv. Unique identifier (collector's numbering system discussed earlier)
v. Location coordinates as specified in BPA call (x,y coordinates)
vi. An Excel spreadsheet summarizing associated species.

b. Depending on the BPA call, the Contractor may be required to present survey results in person to Agency Botanists, using a PowerPoint presentation to show photos of habitats surveyed and photos of target plants and the habitat these populations occurred in. Presentation would be one hour or less and the Contractor would respond to questions and interact with Agency Botanists.

The specific BPA call may require additional data such as:

a. Tables and/or charts indicating target species occurrences, habitat, abundance and plant communities or plant associations.
b. If more than 10 specimens of one species are found, summarize the habitat, substrate, site types and other relevant ecological information.

Professional Services

Resource studies for botany, fish, and wildlife may include biological evaluation or biological assessment preparation consistent with the appropriate Forest Service manual and handbook direction.

Prepare a botanical report and a Biological Assessment/ Evaluation (BA/BE), consistent with Forest Service Manual 2670 (or other Agency specifics), for any threatened, endangered, proposed, candidate or sensitive plant species that are known or suspected to occur within the project area or for which potential habitat has been identified. Data collected in support of these evaluations must be in a format that allows assessments to be completed that contribute to determinations of effects under the Endangered Species Act, consistency with Forest Plan direction, and general NEPA effects disclosure. The USFS or Issuing Agency will provide a list of plants to be assessed. The USFS retains decision-making authority.

NEPA

If tasked, a Botanist must prepare a botanical report for at-risk species (threatened, endangered, proposed, candidate, sensitive, species of conservation concern, or species identified by the Forest) and invasive plant species. Plant surveys must be conducted in compliance with policy contained in Forest Service direction, including the Forest Service Manual.

If tasked, a Botanist must prepare a draft Biological Assessment/Evaluation for any threatened, endangered, proposed candidate or sensitive plant species that are known or suspected to occur within the project area, or for which potential habitat has been identified. Data collected in support of these evaluations must be in a format that allows assessments to be completed that contribute to determinations of effects under the ESA, consistency with Forest Plan direction and general NEPA effects disclosure.

The Forest Service will provide a list of plants to be assessed. The Forest Service retains approval authority and the ability to revise determinations for any Biological Assessment / Biological Evaluation written.

The contractor must be knowledgeable in the principles, practices, and concepts of botany sufficient to perform the identification, surveying and/or sampling techniques and management of plants, including terrestrial and aquatic invasive plant species. The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct vegetation inventories and plant work; of vegetation

communities as described in botanical literature to identify plant communities during field inventories; and professional knowledge of plant taxonomy in order to identify plants during field inventories and to confirm identification utilizing other resources. The contractor must be knowledgeable of federal, state, and county terrestrial and aquatic invasive species regulations. The contractor must be knowledgeable of the ESA. Special permits/certifications to perform this work may be required of the contractor.

Work may include analyzing the current condition of invasive plants for the project area including risk assessments for introduction and spread of species. Work may include collecting sufficient field information to prepare appropriate mitigation measures, determining feasible treatment options, and assessing effects of the proposed action. Work may include data collection, which must be in compliance with policy contained in the Forest Service Manual and any other pertinent information provided by the Forest Service in the order.

Climate Support Services (NEPA Scope)

The contractor must be knowledgeable of climate variability and science, climate data, and ecological social and economic processes and possess the skill to evaluate and assess the impact of various management practices. The work may include evaluating the effects of climate variability and change on a proposed program or project; the effect of a proposed program or project on carbon levels through greenhouse gas emissions and sequestration; and the cumulative effect of the program or project and climate change on other resources of interest.

Work may consist of assessing physical, biological, social and economic resources of an identifiable portion of plan area to determine the role of climate variability and change, to analyze the environmental impacts at the appropriate scale using the best available science (e.g., Template for Assessing Climate Change Impacts and Management Options), and to integrate climate change into the environmental analysis document. Planning and analysis work may include incorporating cumulative effects and climate-related vulnerabilities and uncertainties into program and project-level environmental analyses and discussions.

Evaluate and assess the environmental impact of various management practices, with consideration of climate science, climate models, and ecological processes. Determine the effect of climate change on a proposed project; the effect of a proposed project on climate change through greenhouse gas emissions and sequestration; and the cumulative effect of the project and climate change on other resources of interest.

Assess physical, biological and social resources of an identifiable portion of an ecosystem to determine the role of climate change, to analyze the environmental impacts at the appropriate scale using the best climate change information available, and to integrate climate change into the environmental analysis document. Include incorporating climate-related vulnerabilities and uncertainties into land management and project-level environmental analyses and discussing how a range of uncertain future climate conditions might affect the expected consequences of proposed activities. For activities in Region 4, the 2018 Interagency Partnership Climate Change Vulnerability and Adaptation in the Intermountain Region (General Technical Report 375, available at https://adaptationpartners.org/iap/ shall be the basis for analysis and assessment.

Communications and Community Engagement Specialist Services (Communications/Tribal Liaison Scope)

The contractor will work with identified core leadership to develop themes, goals and objectives to design a high-level approach. The contractor will be responsible for coaching various work groups. Group coaching will be conducted with a strong emphasis on facilitated experiential learning and professional growth. The contractor must provide a customizable approach to engagements and possess skill in design and conduct

of virtual meetings. Contractor must be an agile resource able to be utilized intermittently. Additionally, the contractor will deliver facilitation and change management consulting services via methodology reflecting new research, new ideas, and changes in the workplace as well as experiences and feedback from previous sessions.

As the socio-economic, public expectations and demands and organizational focus changes, so does the need for agency market and industry representation. All these changes impact the focus and management of internal resources, both physical and emotional. The contractor will be responsible for assisting the agency in focusing on developing and marketing Values, Purpose, and Relationships in stewardship of national resources.

Examples of common Communications and Community Engagement Specialist Services:

Work under the awarded BPAs may relate to the following typical subject areas. This list is not all- inclusive:

- Develop communication plans
- Town Halls (Internal and External, in-person and virtual)
- Engagement work models
- Marketing Plans
- Strategy and visualization for Life-Work/Work Environments
- Design and delivery of Leadership forums
- Brand Initiatives
- Socialize and deploy agency programs and efforts
- Advance Agency Community Engagement
- Public Awareness
- Targeting Market Identification and Analysis
- Identifying and Implementing Strategies
- Development and execution of Agency Values promotion efforts
- Conducting Focus Groups
- Facilitation of Leadership Development activities
- Preparing/distributing/compiling and analyzing of surveys
- Facilitated meetings
- Leadership development
- Mentoring and coaching for the development and implementation of emotional intelligence-based leadership and function
- Coaching various work groups

Data Collection and Analysis (NEPA Scope)

Collect (Inventory) and Analyze Data (NEPA) – which may include maximum use of existing Agency data and information available, new data collection following established Agency protocols and methods (as defined in the Forest Handbook, Manual, or local supplements), GPS data collection, mapping, GIS work and data entry to agency standards. The inventory work may be updating an existing inventory or creating a new inventory. Analysis must be conducted using rigorous, valid analytical techniques.

The following guidelines are primarily related to the gathering of resource information:

A. Maximize the use of existing National Forest information available before initiating field investigation or inventory activity. Available information will be identified as part of the Government Furnished Property.

B. The Contractor shall not release data or information gathered through a task order without written permission of the Government.
C. Public law, regulations, manuals, and handbooks referenced are subject to change.
D. The Government requires that all data collected and prepared for the basis of summary documentation is delivered to the Government at the conclusion of the study in an appropriate electronic format that allows future use by the Agency. Original hard copy information such as field data collection forms, etc. may also be required to be delivered to the Agency. In addition, the Contractor shall document any updates made to government furnished data as a result of field checking or other means of verification. As a minimum, state what the updates were, what areas were affected, and why.

Data Steward Services (Technical Data Support Scope)

Includes, but not limited to:

This work includes all aspects of Software, Technical Support & Database Maintenance and support.

This Scope includes Software, Technical Support, and Database Maintenance. Maintain software to provide database architecture, inventory processing, harvest planning and sustainability, or any other relevant functionality including technical support, incorporate ongoing research informed by best available science, and ranking of the attributes. Components of these attributes the contractor will address are listed below:

1. Provide ongoing software & tech support.
2. Work with the federal databases.
3. Compile vegetation database GIS updates, recalibration of the model and upload of data.

Designation and Cruising (Professional Services Scope)

This scope includes, but is not limited to:

1. A Forester or Forestry Technician shall determine and flag harvest unit boundaries following NEPA specific standards for logging feasibility, riparian habitat conservations areas, unsuitable forest lands, etc.
2. A Forester or Forestry Technician shall oversee designation of boundaries and trees for cut or leave using USFS-provided paint. Paint shall be accounted for in accordance with Forest directions. Use marking guides developed from the silvicultural prescription. Follow Regional Accountability standards for marking trees. Personnel assigned to complete this work shall not be employed by or associated with the eventual successful purchaser or contractor of the timber sale or stewardship contract.
3. A Forester or Forestry Technician shall prepare a cruise plan for the proposed sale. The cruise plan shall be prepared in compliance with policy contained in relevant Agency manuals and/or handbooks (ex: Forest Service Manual 2440 and using guidelines contained in Forest Service Handbook 2409.12 (Cruising Handbook)) and any other pertinent information provided by the Forest Service/Issuing Agency Certified Advanced Cruiser.
    a. Acceptable cruising methods include 3P, sample tree cruising, point variable plot count/measure, and fixed plot. The cruising method will be approved by the Forest Service.
4. A Forester or Forestry Technician shall cruise the sale area during or after tree designation. The cruise plan shall be followed. Cruise data shall be processed using the Forest Service cruise processing software using Region specific volume equations. The cruise must meet the standards specified in

Forest Service Handbook 2409.12 (Cruising Handbook). The cruise must pass a standard check cruise by a USFS-Certified Check Cruiser.

5. A qualified cruiser is responsible for applying a variety of volume determination techniques. Working alone, as a crew member, or as a crew leader, a qualified cruiser must ensure all necessary field work is completed in compliance with cruise plan instructions. This includes, but is not limited to, preparation of data for computer compilation. A Qualified Cruiser must meet the requirement in *Forest Service Handbook* 2409.12 Chapter 60, 61.1 Qualified Cruiser.

Ecological Restoration (Natural Resource Restoration Scope)

Ecological restoration in both terrestrial and aquatic settings in varied and diverse environments and not limited to native habitat restoration/enhancement (wildlife, fisheries, etc.); road construction (cut and fill slopes, source pits, spoils areas, landscaping, ERFO, etc.); mine reclamation (tailings, waste rock, overburden, etc.); fire rehabilitation (BAER, habitat improvement, etc.).

Economist (NEPA Scope)

As a recognized authority in economic analysis, evaluates and interprets study findings and prepares authoritative reports and recommendations based on those findings for publication. Assumes full technical responsibility for the interpretation and application of economic analysis findings and publishes original research on economic development, the determinants of economic growth, and the linkages of growth and investments in particular sectors with poverty reduction.

Provides expert analysis and advice on agency-wide programs or issues of national impact. Applies advanced techniques to interpret and evaluate findings resulting from analysis. Reconciles conflicts between basic policies and program goals. Provides expert advice and recommendations to top management officials. Identifies reasons for the nature and /or extent of program-related problems that arise and investigates areas in need of improvements. Recommends options that remedy problematic situations. Writes comprehensive resolution recommendations. Formally presents findings before large and diverse audiences, such as Federal, state, and local government representatives, special interest groups, the community, the media, etc.

Tasks of an economist relative to NEPA may be to:

1. Describe the geographic, economic, and social features of the area of influence, its State or regional context, and the links (relationships) between the Forest units and the area of influence.
2. Discuss the lifestyle, values, concerns, social organization, population characteristics, civil rights considerations, and land-use patterns of the area of influence and explain their significance to Forest management.
3. Identify relevant social and economic trends and project their future course. Project trends and expected Forest uses 10 to 20 years into the future and consider trends over the past 20 or 30 years to aid in interpreting current and future conditions. Trends may be extended further, but longer-range projections are less accurate.
4. When appropriate, present a strategy for the analysis of major Forest Service actions currently under consideration. Depending on the available data, it may be possible to analyze salient issues, identify critical social and socioeconomic variables for estimating effects, discuss the effects of various action alternatives, or cite sources and methods for acquiring necessary data.
5. Note problems of data reliability, inconsistency, or gaps in relevant information that may affect the estimation of effects.

Socio-Economics and Economic Viability

- Collect data on the social and economic environment including information related to subsistence resources and uses. It may include analysis of social and economic information for NEPA or landscape analysis.
- Describe the social and economic conditions or contributions of the project area in relation to the local and regional settings. The socio-economic analysis must include various resource values including recreation, scenery, habitat, and other related items.
- Financial and Economic Analysis shall be completed as guided by FSH 2409.18. This work will be completed for the project area in relation to local and regional values. The purpose of this analysis will be to determine the most cost-efficient and practicable method/approach to achieve the objectives outlined by Forest plans and to produce a program/project where the long-term benefits exceed costs (FSM 2430.3).
- Socio-Economic analysis work may include data collection on the social and economic environment, including information related to subsistence resources and uses. It may include analysis of social and economic information for a project scale environmental analysis, landscape analysis, or for a Forest Plan. Where local Forest Plans include economic analyses, project scale analyses may build from these broader assessments in a manner where their conclusions can be tied back to those made in the Forest Plan.
- The contractor may be tasked with describing the social and economic conditions or contributions of the project area or plan area in relation to the local and regional settings. The socio-economic analysis may include various resource values including recreation, scenery, habitat, etc. As requested by the Forest Service, the contractor may be tasked with coordinating with local states and counties in order to assess implications to non-federal economic development plans.
- Socio-economic analysis may include the use of economic sector input-output models (such as IMPLAN) to estimate changes in jobs and income. Other analyses may be needed to evaluate trends associated with monitoring socio-economic indicators at local or regional scales.

Environmental Compliance Coordination (NEPA Scope)

Some key laws, regulations and policies are included below or will be included at the call order level. This list is not all-inclusive. The Contractor must ensure compliance with all relevant laws, regulations and policies, including any local regulations.

1. National Environmental Policy Act (NEPA)
2. National Forest Management Act (NFMA)
3. Archaeological Resources Protection Act (ARPA)
4. Bald and Golden Eagle Protection Act (BGEPA)
5. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA /Superfund)
6. Clean Air Act
7. Clean Water Act (CWA)
8. Dredged Material Management Program (DMMP)
9. Endangered Species Act (ESA)
10. Fish and Wildlife Coordination Act (FWCA)
11. Magnuson-Stevens Fishery Conservation and Management Act (MSA)
12. Migratory Bird Treaty Act (MBTA)
13. Model Toxics Control Act (MTCA)
14. National Historic Preservation Act (NHPA)

15. Alaska National Interest Lands Conservation Act (ANILCA)
16. Roadless Area Conservation Rule
17. Section 508 of the Rehabilitation Act
18. Code of Federal Regulations
19. Forest Service Handbook and Manual

Public law, regulations, manuals, and handbooks referenced are subject to change. Any new legislation or changes to existing documentation are incorporated into the BPA by this reference.

The scope of the BPA includes project management support and technical support for Environmental Analysis and Decision Making (EADM) and NEPA activities such as data collection and analysis, assessments, inventories, and plan/report writing, which require specific expertise in:

- National Forest Management Act (NFMA) land and resource management plan compliance

Environmental Justice Analysis (NEPA Scope)

Contractors may be used as subject matter experts to design and lead a preliminary assessment of key Forest Service or other agency programs to identify opportunities to further programmatic equity and environmental justice.

Contractors may be required to assist in developing an assessment process that is grounded in knowledge of existing policies as well as experience in applying those policies within the federal government.

Contractors may be tasked with a focus on NEPA coordination, project design, and meaningful public engagement.

Agencies may seek contractor services to further their goals of promoting environmental justice and equity, specifically to assist with: (1) a review and analysis of environmental assessment documents and policies from federal, state, and local agencies regarding determinations of geographic reach / geographic scope for identifying and assessing infrastructure project impacts on environmental justice communities; (2) research and analysis concerning federal, state, and local agencies' collection and use of publicly available and community-informed health datasets in the context of environmental assessment of impacts on environmental justice communities; and (3) research on currently available mapping and data tools used by federal, state, and local agencies in their environmental justice analyses.

Equipment Management

The scope of this PWS is to provide continued logistics services supporting newly procured and existing programs. The contracted support service personnel will assist with a full array of logistics and support services. The general scope of the equipment manager requirement is to provide life-cycle support for equipment required to enable the specified mission. Life-cycle support includes identifying requirements, procurement recommendations, sustainment, storage, inspection, maintenance, testing, repair, establish and replenish bench-stock and tools, and replacement as needed.

Contractor may be asked to perform inventories, inspect all mission equipment and work directly with either support units or manufacturer for the repair and/or replacement of unit's mission equipment and perform schedule/preventative maintenance in accordance with equipment inspection.

Facilities Maintenance (Amendment 4)

Construction is not included in this BPA.

Maintenance to the interior and exterior of facilities. Maintenance activities can be defined as making or keeping a structure, fixture or foundation (substrates) in proper condition in a routine, scheduled, or anticipated fashion. This definition implies keeping equipment working in its existing state, i.e., preventing its failure or decline. If the scope or work is determined to fall under construction based on this definition, another contracting tool shall be used. **These do not include improvements as defined in OSHA Regulations. This is to ensure that the equipment continues to work in its existing state, i.e., preventing its failure or decline.**

- Provide Parts and Materials
- Electrical Maintenance
- Plumbing Maintenance
- Locksmith / Door Maintenance
- HVAC Maintenance
- General Labor
- Audio Video specialist

Field-Based Project Management, Logistics, Safety & Security Services (Amendment 6)

This scope is intended to cover non-personal services for various field-based project management, logistics, or safety and security services such as traffic control which may include flaggers, pilot cars, and signage management when Federal projects may be required to provide these services during project work. For example, this may include, flagging and pilot services on a state highway that is affected by smoke from a wildfire or prescribed burn. This work may also include posting and maintaining warning signs.

Safety and Security may be armed or unarmed, based on applicable laws, regulations, and certification/licensure requirements. Services may include, but are not limited to:

- Wildland Fire and/or Other Emergency Response
- Miscellaneous Federal Events or Activities
- Access Control Systems
- Video Surveillance Systems
- Intrusion Detection Systems
- Security Personnel and Patrol
- Cargo and Container Security
- Vessel Security and Maritime Patrols

Example of Requirements that you may see at the Call Order include but are not limited to:

The Contractor shall furnish all equipment, transportation, labor, operating supplies, supervision, fuel, and maintenance for equipment necessary to perform the work described. All of these costs must be figured into your bid rate.

The Contractor shall maintain all signs and equipment utilized on site for the duration of the job and will promptly remove signs and equipment from the highway when no longer required.

Work shall be performed as directed by the Contracting Officer, in a written task or verbal order which will be memorialized in writing.

The Contractor shall provide only Flaggers who are certified and possess a valid state flagger card or one from a state that is a party to the interstate reciprocity agreement of the State specified in the requirement. Copies of the certificates will be required for all employees working under this contract.

1. All signs shall meet the requirements of Manual of Uniform Traffic Control Devices, Oregon Supplement to the MUTCD and the Oregon Temporary Traffic Control Handbook (OTTCH), or applicable state documents.
2. All signs shall be a minimum 48" x 48" (Except hand-held "Slow/Stop").
3. All signs shall be reflective.
4. All signs set a minimum one (1) foot above roadway.
5. Sign ballast material shall be sandbags filled with dirt or sand. Rocks or wood are not allowed as ballast.
6. Level 2 and 3 signs require two (2) orange flags which are at least 16" square mounted above the sign. Flags shall be mounted so that entire legend is visible.
7. Sign spacing at 500' or as a minimum Advance Warning sign to be 1,500'.
8. Pilot car to be a four-wheeled vehicle no smaller than a compact pickup and identified by a minimum 36" x 18" "PILOT CAR- FOLLOW ME" sign and equipped with a yellow, rotating light(s) compliant with State standards and regulations.
9. Night operations require all traffic control devices to be reflective and flagger stations to be illuminated.

OTHER EQUIPMENT

1. Flood light for each flagger (for hours of darkness).
2. Reflectorized vests for flaggers.
3. Radios for communication between flaggers.
4. Radio for communication with prescribed fire Burn Boss. This radio must be capable of communicating within a minimum frequency range of 138 MHz to 174 MHz in the narrowband (12.5 kHz) mode on established Federal and state frequencies. Modified radios are not acceptable. Only radios listed on the National Interagency Fire Center's National Interagency Incident Communications Divisions' website https://www.nifc.gov/resources/NIICD/niicd-documents
    a. Option to allow for Government Furnished radio during prescribed fire operations for communication with the burn boss may be considered at the call level.

Fish Biology & Fisheries Related Services (Professional Services Scope and NEPA Scope)

Fisheries and Wildlife (Professional Services)

- In conjunction with soil and water resources, collect sufficient field information to assess the existing conditions of the aquatic biota and aquatic biota habitat resources for the project area. Data collected in support of these evaluations must be in a format that allows assessments to be completed that contribute to determinations of effects under the Endangered Species Act, consistency with Forest Plan direction, and general NEPA effects disclosure.
- Collect sufficient field information to assess the existing condition of habitats for aquatic and terrestrial wildlife species of concern, including ESA-listed, proposed and candidate species and sensitive species.

- Complete a Biological Assessment/ Evaluation (BA/BE), consistent with Forest Service Manual 2670, for any threatened, endangered, proposed, candidate or sensitive fish or wildlife species that are known or suspected to occur within the project area or for which habitat has been identified. The Forest Service will provide a list of fish and wildlife species to be assessed. The USFS retains approval authority and the ability to reverse determinations for any BA/BE written.

Fisheries and Wildlife (NEPA)

- The contractor may be tasked with collecting sufficient field information to assess the existing conditions of the fish and fish habitat resources for the project area. This may include marine fish resources where appropriate. The Contractor must collect data and provide it in a format that allows assessments to be completed that contribute to determinations of effects under the Endangered Species Act, consistency with Forest Plan direction and plan components, and general NEPA effects disclosure.
- The contractor may be tasked with collecting sufficient field information to assess the existing condition of habitats for aquatic and terrestrial wildlife species of concern.
- The contractor may be tasked with conducting a Biological Evaluation for any threatened, endangered, proposed, candidate or sensitive fish or wildlife species that are known or suspected to occur within the program or project area, or for which habitat has been identified.
- The Forest Service will provide a list of fish and wildlife species to be assessed. The Forest Service retains the responsibility for the content of any Biological Assessment / Biological Evaluation written.
- The contractor must be knowledgeable in the principles, practices, and concepts of fisheries and wildlife science and management sufficient to perform the identification, surveying and/or sampling techniques of terrestrial and aquatic flora and fauna.
- The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct fisheries and wildlife inventories and related work; of animal communities as described in fisheries and wildlife literature to identify animal communities during field inventories; and professional knowledge of terrestrial and aquatic animal taxonomy in order to identify animals during field inventories and to confirm identification of animals utilizing taxonomic keys.
- The contractor must be knowledgeable of federal, state, and local terrestrial and aquatic species regulations and of the ESA. Special permits/certifications to perform this work may be required of the contractor.

Terrestrial and Aquatic Invasive Species (NEPA)

- A qualified Fisheries and/or Wildlife Biologist must be used to prepare a biological report for invasive fish and/or wildlife species.
- The contractor must be knowledgeable in the principles, practices, and concepts of botany sufficient to perform the identification, surveying and/or sampling techniques and management of terrestrial and aquatic invasive species. The contractor must be knowledgeable in the principles, practices, and concepts of fisheries and wildlife science sufficient to perform the identification, surveying and/or sampling techniques and management of terrestrial and aquatic invasive faunal species.
- The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct vegetation inventories and plant work; of vegetation communities as described in botanical literature to identify plant communities during field inventories; and professional knowledge of plant taxonomy in order to identify plants during field inventories and to confirm identification utilizing other resources. The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct fisheries and wildlife inventories and related

work; of animal communities as described in fisheries and wildlife literature to identify animal communities during field inventories; and professional knowledge of terrestrial and aquatic animal taxonomy in order to identify animals during field inventories and to confirm identification utilizing other resources.

- The contractor may be tasked with collecting sufficient field information to assess the existing condition of habitats for invasive fauna species.
- The contractor must be knowledgeable of federal, state, county, and local terrestrial and aquatic invasive species regulations and of the ESA. Special permits/certifications to perform this work may be required of the contractor.
- Work may include analyzing the current condition of invasive plants for the project area including risk assessments for introduction and spread of species; collecting sufficient field information to prepare appropriate mitigation measures, determining feasible treatment options, and assessing effects of the proposed action; and addressing cumulative effects and mitigation measures.

Forestry Related Services (Professional Services Scope and NEPA Scope)

The USDA-Forest Service in fulfillment of its vegetation, land use, and resource management functions, requires a variety of professional and forestry related services in the natural resources environment, and technical sciences to meet operational requirements as well as legal requirements imposed by such laws as the National Environmental Policy Act (NEPA), National Forest Preservation Act (NFPA), National Historic Preservation Act (NHPA), National Forest Management Act (NFMA) and others.

This BPA shall provide scientific and professional services contributing to the integrated vegetation management program, and other professional, analytical, and scientific services used for land and resource management by the USDA Forest Service and other government entities. Work under this BPA will relate to the following typical subject areas, or those that are similar in nature. This list is not all-inclusive:

- Forester
- Forest Analyst
- Forest Biometrician
- Forest Ecologist
- Forest Economist
- Fuels Specialist
- Qualified Cruiser
- Technicians or laborers

Skills in using Analysis software such as R, ArcGIS, GPS devices and processing software, and Microsoft Office products may be required as well.

State license or certification requirements: If a state where the work is to be performed requires a license or certification, the professional proposed shall meet this requirement.

- Timber Management work may include conducting formal stand examinations or more general "walk-through" examinations all based on the Common Stand Exam Protocols. Using stand and other resource information, the Contractor shall develop diagnostic and/or implementation prescriptions for timber sale or stewardship projects. Work may include all aspects of preparing timber projects from harvest unit boundary location, road location, boundary or road traverses using GPS equipment, marking and cruising and documenting tree measurements on USFS provided cruise cards, tree designation, prescription implementation, creating sale area maps, timber value appraisals, and related documents substantiating all preparation work accomplished. Work may

also include development of plans for accessing commercial forestlands, assigning relative values to the plans to reflect resource needs, logging/road limitations and economics, and field verification of these plans.

- Analyze the current condition of insect disease and fuels buildup for the project area including basic predictions resulting from current conditions. Collect sufficient field information to prepare diagnostic prescriptions, determine feasible treatment options, and to assess effects on listed or proposed plant species.
- A Forester shall prepare a silvicultural prescription for each area proposed for harvest or treatment (e.g., fuel treatment, reforestation, timber stand improvement, or mechanical habitat improvement). Prescriptions shall be prepared in compliance with policy contained in Forest Service Manual 2470 and using guidelines contained in Forest Service Handbook 2409.17 (Silvicultural Practices Handbook) and any other pertinent information provided by the USFS. The prescriptions shall be prepared to the satisfaction of a Forest Service Certified Silviculturist, who will approve the prescriptions in writing once satisfied.
- Personnel conducting Common Stand Exams shall be familiar with the Regional or other Applicable Common Stand Exam Field Guide, Appendices and/or Data collection forms.

Data collection may include field surveys such as stake tree survival exams, GPS feature and boundary survey (e.g., plot centers, streams, stand polygons), forest inventory plot measurement and establishment, stocking surveys and stand density exams, periodic exams conducted from time of planting to stand maturity, and various other field-based measurements of vegetation and the environment.

Fuels Reduction Treatments (Professional Services Scope and Amendment 4)

Contractor shall prepare a fuels management plan for each stand proposed for harvest or vegetative treatment. Data collection for the plan shall be in compliance with policy contained in *Forest Service Manual 5150* and any other pertinent information provided by the USFS – OR issuing agency.

Disposal of slash and biomass using portable air curtain incinerators or ACI's. *An air curtain burner, also called an air curtain incinerator, carbonator, or mechanized burner operates by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs*.

Fuels Specialist: The term Fuels Specialist refers to an individual with a background in forestry or fire science and a firm knowledge of fuel measurements, fuel models, fire behavior relationships, natural fire regime, and vegetation conditions. A Fuels Specialist must have at least five (5) years of demonstrated experience.

Other Fuels Reduction work is general in nature and associated with, but not limited to, plantation thinning, pullback, pre-commercial thinning to a variable density, hand piling, grapple piling, burning of slash piles, mechanical thinning with mastication/slash busting, timber stand improvement, site preparation and other activities including chemical treatments that coincide with this type of work. Deviations and additional specifications will be identified in individual Call Orders. All future Call Orders placed under a resultant contract will include Detailed Unit Information Sheets (DUIS) and any other documentation necessary to understand the desired outcome. The DUIS can be more restrictive than the terms of the contract and, when this is the case, the DUIS will take precedence.

The Contractor shall furnish all labor, supervision, equipment, materials, transportation, supplies (unless specified elsewhere as Government-furnished), and incidentals needed to complete specified work. The

Contractor shall develop a plan of operation to accomplish the objectives, including a written quality control plan and a safety plan that are in compliance with the terms and specifications of the contract.

This scope may include Prescribed Fire/Fuels Treatment Modules-which includes the following:

- Two-Person Crew Module
- Engine Module
- Five-Person Crew Module
- Water Delivery System and Two-Person Crew Module
- Water Tender Module
- Five-Person Chainsaw Crew Module
- Prescribed Fire Overhead Module
- Hazard Tree Felling Module
- Tractor Operations
    - Excavator Operations

Geology and/or Minerals Services (Professional Services Scope and NEPA Scope)

Minerals and Geology (NEPA)

Geologists (resource geologists, hydro-geologists, engineering geologists, geomorphologists, or paleontologists) must be used to perform the necessary geologic, geomorphologic, or paleontological components of resource inventory, analysis or monitoring - for Service Contracts Only, no A&E.

The work may range in specificity from landscape to site-specific and may include working as part of an interdisciplinary team conducting Ecological Unit Inventory or other inventories, Watershed Analyses, or other integrated work. Specialized geologic skills are required when conducting groundwater studies, or when doing landslide investigations, karst and sink hole investigations, paleontological surveys, and other work requiring the characterization of soil and rock material for engineering and environmental purposes, such as with acid producing rock.

The contractor may be tasked to address cumulative effects and mitigation measures. A Geologist must be utilized to locate and document unstable land hazard areas and investigate surface and groundwater implications of mineral exploration and mining operations. These findings may be used by the Forest Service to facilitate layout and design of transportation and harvest systems.

Minerals and Geology (Professional Services)

The contractor will employ geologists (resource geologists, or geomorphologists) to perform the necessary geologic and geomorphology components of resource inventory, analysis or monitoring. The work will range in specificity from landscape to site-specific and may include working as part of an interdisciplinary team conducting Ecological Unit Inventory, Watershed Analyses or other integrated work.

Specialized geologic skills shall be required when conducting groundwater studies or when completing landslide investigations and other work requiring the characterization of soil and rock material for engineering purposes.

A professionally certified geologist may be required to locate and document unstable land hazard areas to facilitate layout and design of transportation and harvest systems.

Geologist: The term Geologist refers to individuals who are registered as a Registered Professional Geologist (RPG). Individuals conducting Groundwater resource evaluations, studies or monitoring may also require State Geology specialty certification as a Hydrogeologist. State certification in Certified Engineering Geologist (CEG) may be required of individuals conducting geologic work in the state that involves characterizing geologic materials (soil and rock) and processes (geomorphology) for geologic hazard evaluations, and other purposes where human health and safety, structures, or resources many be at risk (for Service Contracts Only, no A&E).

GIS Services / GIS Specialist (Professional Services Scope, NEPA Scope and Cultural Resources Scope)

GIS Professional Services

Geographic Information System work may include digitizing data for entry into a system, designing and conducting various resource mapping and analysis for projects, creating various products for inclusion in NEPA and maps for timber sale or stewardship contract packages, or other documents or public display items, or other electronic related resource or geographic analysis.

The Contractor shall use a computer-based Geographic Information System compatible with the National Forest system software, ARCINF.

The electronic data, both products and additions to the database, shall be delivered to the USFS at the conclusion of each project or BPA call. The Contractor shall supply coverage additions, updates and corrections to base layers with full documentation so that the updates may be verified before application to the Forest Service database. Any data capture must meet minimum spatial accuracy consistent with USGS 7.5-minute Quadrangle sheets, 1:24,000 scale or larger. GIS coverage file naming, map projections, items and valid codes shall be consistent with the Regional Forest Resource Data Base Dictionary, or other National or Regional approved data base.

Geographic Information System (GIS) work may include digitizing for entry into the system, designing and conducting various resource mapping and analysis for projects, creating various products for inclusion in the environmental analysis documents, or other documents or public display, or other electronic related resource or geographic analysis.

NEPA

The Contractor must use a computer-based GIS compatible with the National Forest system software, ArcGIS version 10.3 or as specified in the order.

The electronic data, including products and additions to the database, must be delivered to the Forest Service at the conclusion of each project or study. The Contractor must supply GIS data additions in ArcGIS compatible format, updates and corrections to base layers with full documentation so that the updates may be verified before application to the Forest Service database. Any data capture must meet minimum spatial accuracy consistent with USGS 7.5-minute Quadrangle sheets, 1:24,000 scale or larger (1:63,360 scale or larger if in Alaska). GIS file naming, map projections, items and valid codes must be consistent with the Regional Forest Resource Data Base Dictionary, or other National or Regional approved database.

Statistical data analysis of forest inventory data, wildlife habitat data, geologic data, etc. may also be required.

Geographic Information Systems Support and Probability Modeling (Cultural Resources Scope)

Work includes the following: The ability to interpret and analyze cultural resources distribution variances (to include slope, landforms, regional variances. etc.) and statistical analysis to produce probability models for identifying cultural resources. See also GIS specific support in the data entry item above. GIS work may include digitizing data for entry into a system, designing and conducting various resource mapping and analysis for projects, creating various products for inclusion in cultural resource reports or CRMPs or HRMPs, or other documents or display items, or other electronic related resource or geographic analysis.

The Contractor shall use a computer-based GIS compatible with Forest Service/BLM/NPS system software, ARCINFO. The electronic data, both products and additions to the database, shall be delivered to the Forest Service/BLM/NPS at the conclusion of each project or BPA call. The Contractor shall supply shapefiles and when required, geodatabases.

Spatial data standards, including accuracy requirements, will be specified in the Call Order.

GIS specialist personnel shall meet the following minimum qualifications standards:

1. A minimum of two (2) years of full-time professional experience applying the theories, methods and practices of geospatial sciences through geospatial information and remote sensing imagery data lifecycle management, analysis and product development.
2. Products and activities that demonstrate the successful application of acquired proficiencies in the discipline to the practice of geospatial sciences through geospatial information and remote sensing imagery data lifecycle management, analysis and product development.

Graphic Design

Contractor may be asked to create integrated marketing plans with strategies for traditional, digital and social media platforms and emerging technologies, and innovative approaches for implementation and measurement to provide brand recognition and awareness or meet other agency objectives. Deliverables may include brochures, fact sheets, posters, development and production of educational training and media products in support of wildland fire training and public education and event collateral materials that may be distributed at events.

Tasks may include creating content for a variety of purposes including visitor interpretive information, digital communication, e-Newsletters, social media coordination, and others.

Hand Planting / Plant Salvage / Plant Protection (Natural Resource Restoration Scope)

Prepare and plant sites with hand tools. Plant a variety of conifer, shrub, fern, grass, grass-likes, and forb species and stock-types. Plant varied container types and sizes including but not limited to bareroot and balled-and-burlapped into a wide range of ecological settings and substrates. Access may be difficult for some projects and may involve offroad vehicles, pack animals, or other means to transport plant materials and/or labor. Work may require the use of pesticides to control competing vegetation, rodents, or insects, in addition to the application of fertilizer, mycorrhizae, game repellants, etc. Retrieval and disposal of the tubing and tree shelters. Protection of new plantings/seedlings using a variety of caging and fencing options may be necessary to help insure plant survival and establishment. Options may include single plant protection to multi-acre big game enclosures.

Work may also entail salvaging plant material by hand or mechanically (excavator, tree-spade, etc.) to be transplanted directly or at a later time. This may include temporary on-site care/storage of plant material, or transport and care/storage off-site for later use.

Heritage / Archaeology Services (NEPA Scope and Cultural Resources Scope)

Professional Services that may be required:

- Archaeologist/Historian
- Anthropologist/Ethnographer
- GIS Specialist
- Architectural Historian

Cultural Resources Surveys, Monitoring, and Report Preparation

Work includes but may not be limited to: Conduct literature reviews, archival searches, field inventories, site identification and recordation, cultural resources overview preparation, research design development, oral history interviews, site monitoring, project implementation and post- implementation monitoring, site condition assessments, develop mitigation recommendations, and treatment plans. Preparation of draft and final report summarizing findings and recommendations.

National Register of Historic Places (NRHP) Recommendations of Eligibility for Precontact and Historic Resources, to Include Historic Structures

Work includes the following: Potential pedestrian survey (reconnaissance and intensive and testing, identification, compilation, and interpretation of archival materials: Government Land Office (GLO) maps, land history resource, county, borough, and state resources, etc.), Forest Service/BLM/NPS survey and sites files, publications, ethnographic data (if available), photographs, etc. Final product needs to clearly synthesize the information and apply the four NRHP criteria and address the documentation of historic property(ies) through photography. Recommendations for determinations of Eligibility (DOE) will include precontact/historic context, period of significance (and rationale for dates), statement of significance, age, integrity (addressing location, design, setting, materials, workmanship, feeling, and association). Reviewing multiple criteria for a historic property (or district) is required with a justification of why a specific NRHP criterion is excluded from consideration. Refer to Publications of the NRHP https://www.nps.gov/subjects/nationalregister/publications.htm.

Preparation of Draft NRHP Nominations of Individual Properties, Historic Districts, Historic or Cultural Landscapes, and Multiple Properties

Work includes the following: Interpreting archaeological survey and testing results, documentation of historic property(ies) through survey and site forms, photographs, maps/GIS/Global Positioning System (GPS), and other methods. The correct National Park Service form and photographic documentation is required to meet NRHP standards outlined at relevant State Historic Preservation Office/Office of History and Archaeology (SHPO/OHA), and Historic Preservation websites. Ability to identify, gather, and interpret precontact and historic resources (Forest Service/BLM/NPS survey and site files, publications, ethnographic data, and photographs) and synthesize the information to apply the four NRHP criteria, to include Determinations of Eligibility (DOE) elements described above. Refer to Publications of the NRHP https://www.nps.gov/subjects/nationalregister/publications.htm.

Documentation to State and Federal Standards, Architectural Design, and Integrity of Historic Structures

This work combines drawings, history, and photographs to produce a comprehensive, multidisciplinary record that ranges in scope with a site's level of significance and complexity. Documentation of sites to meet standards set forth by the agency and/or local SHPO, Historic American Building Survey (HABS), or Historic American Engineering Record (HAER), or state-level documentation.

Historic Structure Assessments and Preservation, Restoration, Rehabilitation, and Reconstruction

Historic Structure Assessment Work includes the following: Synopsis of physical walk through of structure/s with photographic documentation, research and review of archival documentation, oral histories, an existing condition survey (including exterior and interior architectural elements, structural systems, mechanical systems, etc.), physical problems that need repair (construction materials and systems that exhibit distress or deterioration), building code or functional problems that interfere with its use will be documented. Documentation (AutoCAD, SketchUp, etc.) of each elevation of each structures/s, evaluation of significance, selection and rationale for the most appropriate approach and treatment (preservation, restoration, rehabilitation, and reconstruction) and specific work recommendations with estimated costs. Work recommendation will divide the work into separate phases where practical (as requested by Forest Service/BLM/NPS/or another federal jurisdiction).

Precontact and Historic Context Development

Work includes the following: Research and development of historic contexts for a variety of cultural resources topics. Researching and analyzing cultural resources, archival materials, and data to develop a historic context to improve how the agency manages a type or types of historic properties and to assist with evaluating the property type. Historic contexts will include the following: statement of context, background history, definition of context (establish the thematic, temporal, and geographic parameters of the theme or area of significance), development of theme/s, relationship to state and national context, associated property types, physical characteristics and integrity, relationship to NRHP criteria and bibliography. Refer to Secretary of the Interior's Standards for Preservation Planning, Developing Historic Contexts Guidelines https://www.nps.gov/history/local- law/arch_stnds_1.htm.

Data Entry into Forest Service/BLM/NPS Heritage Program Databases

Work includes the following: Ability to read and interpret correctly data associated with location, survey (type and coverage), and SHPO documentation of archaeological and built resources site forms and records. Transfer of information from archaeological survey and site forms, and other historic property documentation into the Forest Service/BLM/NPS Heritage program database of record and other databases maintained by Forest Service/BLM/NPS Heritage program staff. The work includes working knowledge of GIS, creating polygons, points, and lines, importing project shapefiles, etc. Individual Forest units have specific numerical identification numbers for sites and surveys that will need to be coordinated on.

Data Recovery and Analysis (Lithic, Macro Botanical, Blood Residue, etc.)

Work includes the following: Development of research design and data recovery plans. Archaeological data recovery and laboratory analysis which includes, but is not limited to flotation analysis, soil analysis, lithic analysis, blood residue, and starch analysis.

Preparation of reports associated with the findings resulting from data recovery and analysis, which will include comparing and contrasting with known archaeological data for the specific area or region.

Traditional Cultural Property (TCP) Studies, Including Draft NRHP Nomination Preparation

Work includes the following: Consultation with members of traditional Indigenous communities such as Native American Tribes or nations, Indigenous Hawaiian, and Alaska Native Tribes and Corporations to understand their perspective on properties that play important roles in their historically rooted beliefs, customs, and practices. Preparation of documentation for TCP nomination.

Development of context statements for draft NRHP nomination of TCP. This may require coordination with Tribal Relations staff and work with interested indigenous groups (such as those mentioned above) as requested and coordinated by the Forest Service/BLM/NPS. Interaction with tribal entities shall occur only with the approval and in coordination with the Forest Service/BLM/NPS Tribal Relations Specialist or Advisor.

Historic and Cultural Landscape Analysis

Work includes the following: Conduct literature reviews, archival searches, field inventories, and oral history interviews. Ability to identify and describe various landscape characteristics and the major processes, uses, and physical components visible in the landscape and how they relate to one or more historic context over time. Refer to publications of the NRHP Bulletins 18 and 30 https://www.nps.gov/subjects/nationalregister/publications.htm and National Park Service Preservation Guidance on Cultural Landscapes https://www.nps.gov/subjects/culturallandscapes/preservation.htm.

Cultural Resource Management Plans (CRMP), Historic Property Management Plans (HRMP)

Work includes the following: The development of plan document, project description and background, objectives and responsibilities, cultural context and associative property types, cultural resource studies within the area of potential effect (APE) or property boundary (existing), identification and evaluation of historic property, description of operations and maintenance activities that will occur in APE/property boundary, resource protection measures or avoidance of sites, process for resolving adverse effects to historic properties, and bibliography. Forest Service/BLM/NPS will review and edit drafts as needed prior to the finalization of the plan.

Geographic Information Systems Support and Probability Modeling

Work includes the following: The ability to interpret and analyze cultural resources distribution variances (to include slope, landforms, regional variances. etc.) and statistical analysis to produce probability models for identifying cultural resources. See also GIS specific support in the data entry item above. GIS work may include digitizing data for entry into a system, designing and conducting various resource mapping and analysis for projects, creating various products for inclusion in cultural resource reports or CRMPs or HRMPs, or other documents or display items, or other electronic related resource or geographic analysis.

The Contractor shall use a computer-based GIS compatible with Forest Service/BLM/NPS system software. The electronic data, both products and additions to the database, shall be delivered to the Forest Service/BLM/NPS at the conclusion of each project or BPA call. The Contractor shall supply shapefiles and when required, geodatabases. All data capturing will follow standards set forth by the agency in the contract requirements.

Records Management

Work includes the following: Identify records by Forest Service/BLM/NPS file codes and retention schedules, prepare Forest Service/BLM/NPS records, to include maintenance (such as inventorying and scanning documents) and disposition (coordinate with Forest Service/BLM/NPS records management staff). Convert hard copy files into electronic files with corresponding file structure (to include but not limited to survey and site files).

Preparation of Collections for Curation under Federal Standards

Work includes the following: Includes but is not limited to proper cleaning of artifacts, providing labels, labeling artifacts with accession numbers, applying appropriate preservation procedures to include archival

packaging of collections, and validating accompanying inventory. Preparation of collections will be in accordance with the policy and procedures for the identified curatorial facility.

Interpretive Product Development

Work includes the following: Development and design of interpretive media to include but not limited to exhibits, signs, panels, pamphlets, brochures, other publications, informational web pages and other digital media. Development of interpretive plans (forest-wide, visitors centers, scenic byways, special interest areas, individual properties, etc.).

Tasks are expected to be performed by professional personnel unless otherwise described in the individual BPA call.

All **History, Archaeology, and Architectural History personnel** shall meet the professional qualifications standards found in the Secretary of the Interior's Professional Qualifications Standards and Guidelines for Archaeology and Historic Preservation per FSM 2360.92. Each call order will have local requirements that will be specified at the time of Call.

See also https://www.nps.gov/history/local-law/arch_stnds_9.htm

- Archaeology
- Architectural History
- Curator
- Archivist
- GIS Specialist
- History
- Interpretative Specialist

Cultural and Heritage Resource Surveys and Studies (NEPA)

1. Cultural Resource work may include archaeological, anthropological, historical or other related studies or analyses. It may involve the expertise of archaeologists, anthropologists, historians, curators, architects, preservation engineers, or other related professionals and specialists. It usually involves work with archaeological, historic, or traditional cultural resources.
2. Tasks may include: Cultural resource field surveys, literature, records, or archival searches; cultural resource overviews; preparation of research designs; development and writing of historic contexts; resource inventories and cultural resource site documentation; performing condition assessments of Priority Heritage Assets; cultural resource site monitoring; ethnographies; histories or oral histories; excavations and data recovery; ground-penetrating radar (GPR) studies, metal-detector studies; artifact and data analyses; curation; stabilization or restoration; database entry; development of predictive models; LiDAR processing and interpretation for cultural resources; 3D laser scanning or 3D photogrammetry; interpretation; preparation of National Register of Historic Places and National Historic Landmark nomination forms; preparing documentation of historic American Landscape Survey (HALS); preparing damage assessments to support agency law enforcement personnel with criminal and civil prosecutions under the Archaeological Resources Protection Act (ARPA); providing logistical support to the agency for formal Section 106 and Tribal consultation meetings; or other historic preservation activities. structures and landscapes to the standards set by the Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER); and the Historic American Landscape Survey (HALS); preparing damage assessments to support agency law enforcement personnel with criminal and civil prosecutions under the Archaeological Resources

Protection Act (ARPA); providing logistical support to the agency for formal Section 106 and Tribal consultation meetings; or other historic preservation activities.

3. Cultural Resource work is generally oriented to completing National Historic Preservation Act Section 106 field inventories and reports, consultation evaluating cultural resources sites for National Register eligibility, involving resource providing recommendations to the agency on the significance or National Register eligibility of cultural resources identified during field inventories, performing cultural resource site evaluations for National Register eligibility, providing recommendations to the agency on analysis of the potential of undertakings to adversely affect historic properties to historic values, and mitigation of adverse effects. Work may be oriented to ARPA support and preparation of ARPA damage assessments or the cataloging and curation of artifacts and records to the standards set in 36CFR79. Work may also be oriented to Section 110 historic preservation activities such as cultural resource inventories; cultural resource monitoring, stabilization, or rehabilitation, or public education.
4. Cultural resource surveys may require subsurface shovel testing, typically on a fixed interval along survey transects designed to follow the landforms / topography. The shovel test interval and transect spacing varies by physiographic region or state. Survey methodologies are governed by the individual national forests' Programmatic Agreements (PA). When a national forest has no PA, cultural resource surveys must conform to the guidelines established by the State Historic Preservation Office (SHPO) or equivalent. All soils from these shovel tests are screened through ¼ inch hardware mesh in order to locate artifacts and other cultural materials. All shovel tests are excavated to sterile soils or bedrock. All positive shovel test locations are recorded using GPS.
5. The Forest Service will conduct all government-to-government tribal consultation and consultation with the SHPO(s).

Data Collection and Analysis

See Data Collection and Analysis Scope for more information.

Heritage Resource Surveys and Studies

1. Heritage Resource work may include archaeological, anthropological, historical or other related studies or analyses. It may involve the expertise of archaeologists, anthropologists, historians, curators, architects, preservation engineers, or other related professionals and specialists. It usually involves work with archaeological, historic, or traditional cultural resources.
2. Tasks may include literature, records, or archival searches; overviews; preparation of research designs; resource inventories and documentation; ethnographies; histories or oral histories; excavations and data recovery; artifact and data analyses; curation; stabilization or restoration; interpretation; or other historic preservation activities.
3. Heritage Resource work is generally oriented to completing National Historic Preservation Act Section 106 consultation, involving resource significance or eligibility evaluation, analysis of effects to historic values, and mitigation of adverse effects. Work can also be oriented to Section 110 historic preservation activities such as resource rehabilitation or public education.
4. Identification and assessment of traditional cultural properties (TCP) may require coordination with Tribal Relations staff and work with local Native American Tribes as requested and coordinated by the Agency.

Historian/Archivist (Amendment 4)

The Contractor may be responsible for integration of material into the archive, analyzing and supervising the movement of documents from their current location at the archival office to the headquarters for their processing, appraisal of the material for inclusion in the archive, supervision of the disposal of records not selected for inclusion, establishing the format for the archive of material for inclusion in the archive, preservation and maintenance of the records and supervision of the preparation of an archival catalogue and other materials to assist researchers in surveying the collection for its contents. The historian is engaged in studies which are to become parts of a long-range study of greater magnitude, or a part of the overall history of the agency, must possess a thorough understanding of the objectives of their portions of the study and their relationship to the broader whole. Historians engaged in special historical studies must possess a good understanding of the purposes of the studies and the planning or operational needs of the agency officials who have requested them. Similarly, historians engaged in studies in connection with the identification, recognition, preservation, restoration, reconstruction or interpretation of historic sites of importance to the national historical heritage must be fully familiar with both the purposes to be served by their work and the place of their recommendations in the context of the nationwide program.

Hydrological Services (NEPA Scope)

Water Resources

- If tasked, Hydrologists must perform the necessary hydrologic components of resource inventory, analysis or monitoring. The Hydrologists must be knowledgeable of federal, state, county, and local regulations pertaining mainly to the Clean Water Act and national and local Best Management Practices (BMP).
- Work may include gathering field data to analyze effects of proposed management activities on watershed hydrology, channel morphology, aquatic habitat, water quality, water chemistry, wetlands, vernal pools, and water quality; addressing effects to both surface water and groundwater; and identifying non-point source pollution water quality protection and mitigation requirements in accordance with national and/or local BMPs.
- Work may include addressing cumulative watershed effects and mitigation measures. This may include in the documentation an analysis of location and condition of flood plains, wetlands and riparian management areas that may require additional precautions and/or mitigations.
- In conjunction with soil and fisheries resources, the contractor may be tasked with collecting sufficient field information to assess the existing conditions of the water resources for the project area. Work may include evaluating and documenting channel, stream bank and flood plain stability, and threat of onsite and downstream impacts using local Forest evaluation and analysis protocols.

Hydro-Seeding / Mulching / Fertilizing (Natural Resource Restoration Scope)

Provide a variety of products (tackifiers, mulches, fertilizers, mycorrhizae, etc.) and capabilities (equipment, application methods, personnel, etc.) best suited to project objectives. Minimum equipment requirements may be imposed if terrain is limiting.

Inspection Services

The Contract Inspector (CI) shall serve as the Government's inspector or site representative on construction, services, and other projects to assist with the monitoring of post award contract administration or similar activities. The vendor shall also provide competent and knowledgeable personnel for additional

miscellaneous support services as identified in the Call Order. Inspection services may be required for non-contracted work as well.

Tasks may include:

- Check the Contractor's performance to ensure compliance with the contract requirements.

Inspectors shall notify the Government's Contracting Officer (CO) and Contracting Officer Representative (COR) for final acceptance and/or approval of contractor's work or specified items and/or activities that are performed in accordance with the specifications. If deficiencies or unsatisfactory work being, or about to be, performed are observed, the inspector should prevent the action by pointing out the specification requirements to the Contractor and immediately notifying the C.O. and COR. Questionable matters or indications of needed changes or extensive corrective action by the Contractor should be promptly referred to the CO and COR.

- Maintain an up-to-date and documented contract file. This includes the preparation of a Contract Daily Diary (Attachments -FS 6300-20 and FS 6300-20A) each day on the job to document the facts or occurrences relevant to this contract as they develop. An electronic copy of each diary shall also be provided for CO/COR record-keeping, either in addition to or in place of a hard copy.
- Maintain relations with the Contractor and his representative that are most beneficial to work progress and the Government's best interests. Official communications relevant to the contract should be directed to the Contractor or his authorized representative, as the inspector has no authority or responsibility to supervise other employees

Invasive Plant Control (Professional Services Scope and NEPA Scope)

Professional Services

Provide vegetation and invasive plant treatment plans and control for varied ecological settings within both terrestrial and aquatic habitats and may include inventory, mapping, and monitoring. Provide appropriate state applicator licensing, herbicide use plans, and personnel to control undesirable vegetation, and state listed noxious weeds. Projects for example may include rangeland, forested or wetland habitats, existing or newly constructed roads, trails, landings and may involve inventory, treatment, and/or monitoring. Adjacent lands, rights-of-ways, gravel pits, waste areas, and parking lots may also be treated. Treatments may involve the use of herbicides applied by fixed wing aircraft, helicopter, or ground based. For example, vehicle mounted boom or sprayer, mechanized means such as mowers, brush cutters, weed whackers etc. Backpack sprayers, hand pulling, burning, scalding, covering, etc. may also be employed. Weed treatment for a given project may continue for 3-5 years and require multiple yearly treatments. Treatment in rights-of-ways such as those of Departments of Transportations may be included, some of which might require additional applicator endorsements.

Approved biological control agents may be used including collection and release. The use of goats and/or prescription grazing by other animals or insects to help control invasive species may also be used. Monitor and inventory existing populations and areas susceptible to invasion.

Land Mapping Services (Land Surveys Scope)

<u>This scope does NOT cover anything that would be required in an Architectural & Engineering (A-E) contract.</u>

Individual Call Orders will include the required specifications. Work included in this scope may involve, but is not limited to:

SURVEYS

All surveys under this BPA shall comply with the respective applicable State statutes, regulations, minimum survey minimum standards, the principles, practice, and procedures set forth in the Bureau of Land Management Manual of Surveying Instructions, current edition, as well as the following specifications for the work to be performed.

RESEARCH

Records Research. It is the Contractor's responsibility to research the public records to obtain title and survey information for the property being surveyed and adjoining properties. It may be necessary to perform chain of title work for both the subject property and the adjoining properties.

Landowner Notification. All adjoining landowners shall be notified in writing of intent to survey before beginning field work. Notification letters shall be furnished to COR upon request. A USFS sample letter is available upon request by the contractor. It is the responsibility of the Contractor to obtain permission to cross or enter private lands. The USFS may, at its discretion, notify adjoining landowners in writing of intent to contract survey work, and will notify contractor in advance.

Conflicts, Boundary and Title Disputes. The COR will inform the Contractor of any known conflicts with earlier surveys, title, encroachments, trespass, possession, or occupation of NFS lands along the boundary lines to be surveyed. Any conflicts discovered by the Contractor during the course of the survey shall be reported to the COR as soon as possible. Such discovered conflicts will be shown on the survey plat or surveyor's report.

The Contractor shall report evidentiary facts in regard to possession and or title and provide professional opinion that is relative to the conflict.

CORNER SEARCH, EVALUATION AND DOCUMENTATION

Corner Search. The Contractor shall make a diligent search for, with the intent of recovering and locating, all physical corner evidence required to complete this contract.

Corner Evaluation. The Contractor shall evaluate all the physical evidence and pertinent survey information of record for all previously set monuments and their accessories prior to use and acceptance. Any monuments or accessories accepted or rejected shall be disclosed on the survey plat, with explanation of the reason(s) for rejecting any monuments.

The contracted surveyor will, when feasible and appropriate, employ parole or testimonial evidence, especially in the absence of other physical or record evidence of a corner position, and document accordingly.

Corner Documentation. Corner search activities and evidentiary findings for all monuments and accessories shall be documented in a field book or electronic data collection devices.

FIELD SURVEY, DATA COLLECTION, AND COMPUTATIONS

Survey Methods and Procedures. The survey methods and procedures used shall comply with the respective State statutes, regulations, minimum survey standards, and the GLO/BLM Manuals of Surveying Instructions.

Other requirements may be specified at the call level, *for example*:

1. Survey notes. The surveyor shall keep an accurate and complete record of the survey in a standard bound field book in an orderly and legible fashion, unless using an electronic data collector. All

information pertinent to the work, not recorded in the electronic data collector, shall be recorded including personal contacts with landowners and other interested parties. The field book shall remain the property of the Contractor. Legible photocopies shall then be provided to the COR upon request.

2. Electronic Data Collector. The Contractor may use an electronic data collector system in lieu of a standard hard-bound field book for survey data collection. A separate report shall be furnished to the Government which includes:
    - An ASCII digital copy of the original field data prior to any manipulation or adjustments.
    - Description of the format used, items by line and column, and definition of all descriptor codes.
    - An unambiguous reference system which indexes the data to a Survey Control Diagram.
    - Legible photocopies of all field books used in conjunction with the collection system.

Positional Tolerance. The relative position of each corner established or tied must be determined as part of a closed traverse or point positioning procedure which meets the current standards prescribed by the respective State survey minimum standards.

Basis of Bearings. All bearings shall be based on geodetic (true) north, established by direct astronomic observation, or by use of geodetic control stations that meet or exceed State survey minimum standard requirements, or by GPS/GNSS observations post processed using NGS/OPUS, or other suitable software. An assumed basis of bearings is not acceptable.

Clearing of Survey Lines. No clearing shall be performed on adjoining non-Federal lands and shall only be performed on NFS lands. For survey operations conducted on NFS land, clearing of vegetation shall be confined to the minimum necessary for line of sight. No trees larger than 4 inches diameter (4.5 feet above ground) shall be cleared without the permission of the COR. Under no circumstance shall fruit, shade or ornamental trees, shrubs or hedges, be blazed, marked, or cut during the course of the survey work.

Survey Control Diagram. The Contractor has sole responsibility for maintaining quality control for all aspects of survey work performed under this contract. The Contractor shall provide a control diagram to the COR for review upon request. Each sheet shall be a minimum size of 18" x 24” and be drawn at a scale to show sufficient detail.

Computations. A listing of coordinate values of all survey points shall be provided to the C.O.R. on digital media in ASCII format [point #, northing, easting and descriptor] upon request.

CORNER MONUMENTATION AND ACCESSORIES

Monumentation. All corners, including reference and witness corners, requiring monumentation shall be established in accordance with the 2009 BLM Manual of Surveying Instructions, Section 4-1 through 4-78, using the provided USFS monument. The surveyor’s state registration number shall be stamped on the monument cap in addition to the specific corner information. Pertinent monument information such as type, material, length, diameter, cap marking, and depth in ground, shall be documented and reported in the field notes and on the survey plat.

Existing Monumentation. All accepted existing monumentation shall be maintained so the monument is plumb and firmly set. All wooden and stone monuments shall be re-monumented as specified under section **Monumentation** of this section. Stone monuments shall be re-monumented only when deteriorating features and/or unstable soil conditions are present, or as specified in the task order.

Corner Accessories. Memorials and a minimum of two new corner accessories shall be established on NFS land, in accordance with the 2009 BLM Manual of Surveying Instructions, Sections 4-79 through 4-113, with the exception of mound of stones. All established monuments shall be set in a collar/mound of stone with a base width of 2-3 feet, to top of cap, as practicable.

Corner accessory information such as type, material, length, diameter, cap marking, depth in the ground, tree species and diameter of tree at 4.5 feet above ground, etc., shall documented and reported in the field notes and on the survey plat.

Bearing Tree Posting. All newly established bearing trees shall be posted with a 54-3 "BEARING TREE" sign facing the corner, and with a 54-9 "LAND SURVEY MONUMENT" sign on opposite side of the bearing tree (nailed to allow for tree growth), 4.5 feet above ground and flagged.

Existing Corner Accessories. All existing corner accessories shall be maintained to ensure the accessory is properly signed, legible, securely attached, and flagged.

NFS LAND BOUNDARY LOCATION, MARKING, AND POSTING

Boundary Location. NFS land boundaries shall be posted within +/-1.0 foot of the true line between the two corners that define the boundary line.

Boundary Marking. The NFS land boundaries shall be marked with provided signposts in accordance with the "Property Line Marking and Posting Guide" (Figure 3).

a. At each corner monument established set a signpost firmly in the ground facing the private land or other ownership.
b. Set signposts at intervals of 220-280 feet or inter-visible along the line, as if the trees and brush were removed, unless intervals are specified otherwise by the task order.
c. Set signposts at all stream, trail, road crossings, and ridge tops. Signposts shall not be placed directly within the actual stream or travel way, but approximately five (5) feet on the upland side of the physical feature and posted on each side of roads.

Boundary Posting.

a. At an established corner monument, securely attach (with provided hardware) a #54-2 "PROPERTY BOUNDARY" sign (above) and #54-9 "LAND SURVEY MONUMENT sign (below) to firmly set post, facing the private land or other ownership, and attach flagging.
b. Along the NFS land boundary being located and posted, securely attach a 54-2 "PROPERTY BOUNDARY" sign, facing the private land or other ownership, and attach flagging.

Existing Marked Boundary.

a. a. Signposts found along NFS land boundaries shall be verified to conform to section **Boundary Location**. All reusable signposts determined to be within the location limits of +/-1.0 foot of the true line between two corners that define the boundary line shall be reset plumb and firm in the ground facing the private land or other ownership. All signposts determined to NOT be within the location limits shall be removed.
b. Follow and set new signpost as prescribed under **Boundary Posting**.

Existing Posted Boundary.

a. Replace sign on found maintained signpost if found sign is illegible, loose, damaged, or detached. Follow posting procedures per **Existing Marked Boundary** a. and b.

Erroneous Marked and Posted Lines. The Contractor shall notify the COR upon the discovery of existing signposts which exist along erroneous NFS land boundaries.

INSPECTION

The COR may make periodic inspections of each project as work progresses. The contractor shall, without charge, make available for inspection, originals or copies of such items as field notes, working plats and drawings, material obtained through research, computation sheets, computer printouts, correspondence to and from adjoining landowners, and any other item deemed necessary to ensure contract compliance, and to verify accomplishments. The Contractor shall request an inspection upon completion of the field work as outlined in the contract. The Contractor shall request an inspection upon completion of any corrective field work required by the COR.

PLATS AND REPORTS

Plats. The Contractor shall prepare a recordable survey plat in compliance with the current respective State statutes, regulations, and minimum survey standards. The survey plat shall be filed with the respective County Recorder's or Clerk's Office.

The survey plat shall: show the relationship of recovered and established corner positions used in the survey, location, marking and posting of NFS land boundaries; describe all monuments recovered, established, and rejected, along with their accessories; provide a short narrative explaining the reason any monument was rejected or accepted; and include the record and measured ties to existing accessories.

All survey plats shall show a geodetic position with metadata on one NFS land boundary corner surveyed. Information as to the method used to determine the position and geodetic control shall be provided on the plat or report.

Prior to filing or recording, the Contractor shall submit one paper or electronic pdf copy of the survey plat(s) or corner record form(s) to the COR for review. Upon any corrections and final acceptance, the Contractor will file or record the survey plat. Two paper copies of recorded survey plat(s) and electronic pdf copy shall be provided to the COR.

Forest Supervisor's Certificate. In addition to the survey plat requirements under section **Plats**, each survey plat shall contain the following Forest Supervisor's signature block (with correct supervisor name). The COR will obtain the supervisor signature and return the survey plat to the contractor for filing within approximately 10 business days.

Encroachment Diagram. An encroachment or detailed survey plat diagram is required of encroachment areas to show in greater detail the difference between lines of occupation and lines of title. All features that indicate occupation, where such occupation conflicts with title, shall be shown with a stationing scheme or leaders showing boundary posts set and the location of potential conflicts, encroachments, trespass, or unauthorized use in relation to the nearest survey corner.

Surveyor's Report. The Contract surveyor shall prepare a Surveyor's Report for all work performed under this Contract, unless the same information is exhibited on the survey plat. The report shall contain any information the contractor considers pertinent to the project. At a minimum, the report shall contain the following:

1. History of surveys and a synopsis of the work performed.

2. Results of search for all corners.

3. Methods used for re-establishing missing corners.

4. Written description of any conflict between lines of occupation and title lines.

5. Statements relevant to the project made by adjoining landowners or other interested parties.

6. The surveyor shall sign and date report.

Corner Recordation Form. Contracts the Contractor shall complete that form prescribed by ARS 33-106, a Corner Record Form, for each corner as required by applicable state laws and regulations, unless the method of documentation meets the requirements of section .710 herein. For New Mexico contracts the Contractor may prepare a plat as prescribed by the "Minimum Standards" section 12.8.2.17.E. After approval by the COR, the Contractor shall file the original document in the office of the recorder in the appropriate jurisdiction. A copy of the original form with filing information shall be furnished to the Government.

RIGHT-OF-WAY SURVEYS

In addition to the requirements for surveys as outlined under **SURVEYS**, the following specifications shall be followed.

Specifications. Right-Of-Ways shall be surveyed along existing or proposed centerlines, show all relevant curve data, and shall not be monumented unless directed by the COR. If monumented, shall be at the right-of-way corridor PCs, PTs, and point of ingress/egress intersection with NFS land boundaries. All points of ingress/egress intersection with NFS land boundaries shall be tied to the nearest controlling monument on each side of center line of subject property. Any USFS provided right-of-way monument set shall be properly stamped with the appropriate information and marked with a signpost provided and posted with a provided 54-9 "LAND SURVEY MONUMENT" sign, facing the right-of-way corridor.

Lands And Special Uses (Professional Services Scope and NEPA Scope)

Professional Services

Identify encumbrances and investigate their status and ownership within the sale or contract area. Provide COR with written documentation of investigation that includes a map of acceptable scale.

Provide communication site and transmission line corridor designation documentation and analysis preparation, and/or assessments supporting NEPA analyses for general permit actions in support of accepted proponent applications that do not fall under cost recovery requirements.

Provide a recordable document, which includes an exhibit in map form, which clearly defines the location and extent of any needed right-of-way, connected to property corners.

Examine federal land status records and document any outstanding ownership rights.

NEPA

Lands work may include identifying encumbrances and investigating and documenting the status and ownership. When required for the work, Land Surveyor Reports will be provided by the Government, addressing matters of survey, title, and encumbrances.

Consistent with Forest Service Manual and Handbook direction, ensure appropriate content, procedure and timely submittal of environmental documentation for compliance

Lands work may include identifying significant issues within an exchange, purchase, right-of-way, or sale project area and initiate planning and collaboration to outline what is needed to resolve the issue. Project

area could be landscape scale or just a few acres. In addition to Forest Service personnel, collaboration may include other State and Federal Agencies, non-governmental officers (NGO), and neighboring communities amongst others.

Lands and Special Uses work may also include communication site and transmission line corridor designation documentation and analysis preparation, and/or assessments supporting NEPA analyses for general permit actions in support of accepted proponent applications that do not fall under cost recovery requirements.

Landscape Analysis and Watershed Assessments (Professional Services Scope and NEPA Scope)

Professional Services

Work may consist of assessing physical, biological and social resources of an identifiable portion of an ecosystem to determine program or project opportunities and possible management practices. Public involvement may be a key component of this pre-NEPA type of work.

Determine a program for site development through use of client interviews. Conduct site analysis to identify physical site constraints. Demonstrate use of Best Environmental Design Practices.

Develop conceptual alternative plans for client review. Develop final working drawings and specifications. Conduct scheduled site reviews during construction phase; and final postconstruction site review.

NEPA

Work may consist of assessing physical, soundscape, biological and anthropogenic impacts to resources of an identifiable portion of an ecosystem to determine program or project opportunities and possible management practices. Public involvement support activities may be a key component of this pre-NEPA type work.

Additional models and data may be asked to use with these assessments and analysis.

Landscape Architecture Services (Professional Services Scope and NEPA Scope)

Landscape architect services may include, but are not limited to:

- Provides technical expertise to internal and external stakeholders (e.g., state or municipal governments, non-profit organizations) to accomplish strategic objectives for complex landscape planning initiatives.
- Analyzes land use, cultural resource characteristics, site conditions and visitor experience goals to prepare and oversee contracting packages for landscape design and planning services.
- Creates and manages project proposals, timelines, and budgets.
- Coordinates planning, design, fabrication and installation of environmental graphics and interpretive media that enable visitors to locate, navigate and receive options to further their heritage trail experience.
- Prepares well-written and graphically compelling briefings and funding requests to advance landscape treatment and activation plans.
- Assists with the research, planning, treatment, and preservation maintenance of conventional cultural landscapes. In concert with the supervisor or higher graded specialist, performs landscape architectural duties associated with designing and documenting landscape, and reviewing and monitoring of cultural landscapes.

- Develops and maintains liaisons and effective working relations with related groups and individuals, agencies, and the public.
- Identifies research needs and suitable research designs and conducts routine documentary research and field investigation.
- Conducts on-site investigations of project sites to determine the feasibility of proposed projects, including the development of design alternatives and subsequent analysis to ensure the project is consistent with agency policies, guidelines, and standards and environmental and cultural compliance laws and regulations.
- Monitor construction of landscape projects.
- Participate as an Interdisciplinary team member throughout the NEPA process.
- Conduct scenery or visual analysis for environmental compliance.

Scenery Management (Visual Resource)-Professional Services

Conduct analysis for scenery and visual resources. Describe current landscape characteristics, including a description of the ecological unit, landscape attributes and the landscape's relative scenic attractiveness.

Describe the area's scenic integrity, including historic or past integrity, any interim short-term integrity levels necessary to reach a long-term goal, and an expression of the landscape's "desired condition."

Collect information regarding the constituent(s), including a constituent inventory and analysis; information sources and use of constituent surveys. Determine landscape visibility including the identification of travel ways and use areas, constituent concern levels, "seen" areas, distance zones and scenic classes.

Conduct ecosystem analysis, planning and implementation, alternative development, evaluation and selection, achievement of landscape character goals, and monitoring.

Scenery Management- NEPA

Depending on the forest, either the Scenery Management System (SMS) or Visual Quality Objectives (VQO) process may be required, as determined in the order.

In general, both analysis processes will require the current landscape character to be described, including a description of the ecological unit, landscape attributes and the landscape's scenic attractiveness. Work may include describing the area's scenic integrity, including historical or past integrity, any short-term integrity levels necessary to reach a long-term goal, and description of the landscape's "desired condition".

Work may include collecting information, including inventory and analysis, review sources, and identification of travel ways and areas of use, public concerns, distance zones and scenic classes.

Work may include conducting ecosystem analysis; planning and implementation; a development, evaluation of alternatives and selection of the preferred alternative; achievement of landscape character goals; and monitoring.

Landscaping/Lawn Maintenance (Natural Resource Restoration Scope & Amendment 4)

Work may be associated with previously completed road construction involving restoration work within transportation corridors and may include, weigh stations, rest stops, overlooks, trailheads, parking facilities, administrative facilities, road medians and shoulders, safety zones, over and underpasses, wildlife crossings, ramps, noise abatement screens, and interchanges. Primary to this work is soil stabilization, beautification, maintenance, and functionality. Additional work may consist of designing and implementing

appropriate temporary or permanent irrigation systems, providing topsoil, gravels, rock, logs, mulch, compost, erecting barriers, such as placing a large boulder to restrict/redirect pedestrians and traffic. Design and implement project specific storm-water treatments as needed.

Exterior grounds consist of lawns, native grass areas, gravel, plant beds, parking lot, walks, driveways and curb. The Contractor must provide all labor, tools, equipment, supervision, herbicides, transportation and any other or services necessary, to maintain the landscaping and grounds in such a manner to present a neat and well-maintained appearance.

All products used are to be environmentally friendly and a list and Material Safety Data Sheets (MSDS). The products are to be non-toxic, biodegradable, and made from renewable sources (not petroleum) to promote a healthy and green environment when possible.

Some examples of tasks covered under this scope (this list is not inclusive):

a. **Mow Improved, Semi-Improved Grounds and Native Grassed Areas.** Grass cutting of all lawn areas must be completed as per schedule. Grass clippings must be removed or mulched when visible after mowing. All improved and semi-improved grounds and native grassed areas must look well-manicured at all times.
b. **Edging**. Sidewalks, driveways curbs and other concrete or asphalt edges located in the improved/semi-improved grounds must be concurrent with mowing per schedule. Edging will include removal of vegetation from cracks in sidewalks, driveways, and curbs.
c. **Grass/Weed Trimming.** Grass and weeds must be trimmed around trees, shrubs, buildings, fences, poles, posts, fire hydrants, parking lot bumper blocks, boulders, road shoulders and other fixed obstacles concurrent with mowing schedule. Damage to trees and shrubs from trimming must be repaired by the contractor.
d. **Remove Debris/Police Grounds.** The Contractor must perform general litter patrol on all grounds. Responsibilities will include, but will not be limited to, the removal and disposal of all natural debris (tree limbs, dry brush, rodent habitats, dead animals, etc.) and human-caused debris. All grass clippings must be properly removed and disposed of offsite. Sidewalks and paved areas must be cleaned of all lawn clippings after each mowing. Parking Lots/areas, walks, curb-gutter, sidewalks and concrete flat-work must be kept debris free (includes bark debris, dust and dirt). With the debris properly removed and disposed of offsite. Removal of debris and policing of grounds will be concurrent with mowing schedule.
e. **Application of Fertilizer.** The Contractor must apply an effective fertilizer on all lawns, shrubs, plants and ground cover per Schedule. All fertilizers must be applied in accordance with manufacturer's instructions.
f. **Trimming and Pruning.** The Contractor must maintain a neat and well-maintained appearance of all plants, shrubs, and trees, by proper pruning, clipping, pinching back and shape maintenance. This should take place twice a year, once in January and again in June.
g. **Weed Control.** The Contractor must keep all lawns (includes semi-improved and native grassed areas), shrub beds, ground-cover beds, flower beds, graveled areas and all other adjacent areas free of weeds at all times. Any herbicides must be applied by certified or licensed personnel. This should take place two (2) times a year, once in March and again in June.
h. **Pest Control.** This includes insects and animals of all sizes. The Contractor must provide pest control in lawn and flower beds concurrent with mowing schedule.
i. **Mulch.** Replace mulch/pine straw in flower beds around March timeframe.

j. **Seasonal Flowers**. Provide and change out colorful seasonal flowers in and around all flower beds and trees. (Usually in fall, winter, spring and summer)

Logging And Road Analysis (Professional Services Scope and NEPA Scope)

Professional Services

Road Planning and Timber Logging Preparation work items:

- Flag locations on-the-ground for permanent and temporary roads;
- Conduct road survey and layout;
- Complete cost estimates for road construction and reconstruction using Forest Service cost guides;
- Locate landings;
- Perform on-the-ground skyline profiles and analysis of logging system requirements;
- Locate tail trees, intermediate support trees and related items as needed.

The Government requires various skills for logging road placement and layout that may require or may include consultations, site visits, planning, cost analysis, inspections, documents and review of documents. Various road analyses may include studies to help determine if and where to construct new roads, reconstruct existing roads, or decommission existing roads. Efforts could include road data collection, resource effects analysis, public involvement, and report preparation by a technical expert to create a safe route for Agency purposes. Requirements will be specified at call level.

NEPA

Various activities for logging road placement may include consultations, site visits, planning, cost analysis, inspection, documentation and review of documents. Various road analyses may include studies to help determine if and where to construct new roads, or reconstruct existing roads, or decommission existing roads. Efforts may include road data collection, resource effects analysis including the cost of road construction, reconstruction, or realignment, public involvement, and report preparation.

Logging And Transportation (Professional Services Scope and NEPA Scope)

PROFESSIONAL SERVICES

Plans shall take into consideration the landform stability and related geologic hazards, water quality, riparian and wetland information, specified resource protection requirements and economic considerations. Logging plans will document and recommend a logging system and associated transportation network that provides for treatment of the project area. A technical expert shall accomplish the work requirements in this section.

Develop a transportation analysis with recommendations for needed permanent and temporary road system within the Sale Area or Contract Area Boundary. Include a recommended haul route on National Forest System Roads and county roads to reach the state highway system. The recommended haul route is that route which is most advantageous to the Government.

Transportation planning and analysis shall be completed according to the guidance provided in Forest Service Manual and Handbooks, 7700 Series and specifications provided in the BPA call. Include road surfacing and transportation safety enhancements necessary to accommodate existing traffic and projected sale traffic.

NEPA

Plans must take into consideration the landform stability and related geologic hazards, air quality, water quality, riparian and wetland information, specified resource protection requirements and economic considerations. Logging plans will document and recommend a logging system and associated transportation network to accomplish that treatment of the project area.

The contractor may be tasked with developing a transportation analysis with recommendations for needed permanent and temporary road system(s), including needed safety and roadway enhancements. The contractor may be tasked to include a recommended haul route on National Forest System Roads and County roads to reach the State Highway System. The recommended haul route shall be the route that is the most advantageous to the Government. Transportation planning and analysis must be done in accordance with the guidance in Forest Service Manual and Handbooks, and specifications provided in the order.

Marine Transportation Services (Amendment 6)

Any and all services that carry goods and passengers through waterways, ports, and land-side connections.

Mechanical / Hand Seeding (Natural Resource Restoration Scope)

Provide equipment (tractors, quads, etc.) and capabilities appropriate for the ecological setting (seed drills, mounted broadcast seeders and sprayers, hand seeders, backpack sprayers, etc.) including site and seedbed preparation and maintenance equipment (discs, harrows, rippers, rakes, sprayers, etc.)

Provide a variety of products (tackifier, compost, straw, wood chips, shredded woody material, fertilizer, amendments, etc.) and capabilities (equipment, application methods, personnel, etc.) best suited to project objectives.

Additional services may include placing compost berms, filling and creating wattles, socks, etc. using mulch or compost with a selection of casing materials.

Mechanical / Hydraulic Planting / Plant Protection (Natural Resource Restoration Scope)

Provide a variety of mechanical and hydraulic equipment (mounted augers, handheld augers, water jet, excavator mounted hydraulically actuated expanding "stingers," tree spades, etc.) and capabilities (various hole diameters, depth, portability, reach, substrate penetration, plant configuration capacity, etc.) to maximize planting efficiency and plant survival. Plant a variety of conifer, shrub, fern, grass, grass-likes, and forb species and stock-types. Plant varied container types and configurations including but not limited to bareroot and balled-and-burlapped into a wide range of ecological settings and substrates.

Protection of new plantings/seedlings using a variety of caging and fencing options may be necessary to help insure plant survival and establishment. Options may include single plant protection to multi-acre big game enclosures.

Native Grass and Forb Seed and Straw Production (Natural Resource Restoration Scope)

Native Grass and Forb Seed Production

Services may be required in part or whole depending on project requirements. Produce native grass and forb seed as well as straw to aid in restoration efforts. The Contractor's growing facility may be required to be located within specific geographic ranges, depending on project location and need.

Straw Production

Services may be required in part or whole depending on project requirements. Produce native grass and forb seed as well as straw to aid in restoration efforts. The Contractor's growing facility may be required to be located within specific geographic ranges, depending on project location and need. Delivery to project site may be requested, necessitating appropriate transportation, loading and offloading equipment, and storage equipment.

In addition, monitoring of native grass and forb seed production, as well as the production of straw, will consist of monitoring:

a. Field records to check the progress of contract.
b. State seedling and seed crop reports to verify land requirements, isolation distances and field management standards.
c. Seed tests to ensure minimum standards for germination, purity, other crop, weed, prohibited weeds, and inert matter are met.
d. Operations by making field visits during the contract. The Government may arrange visits to inspect sowing, production fields, harvesting, storage facilities, seed cleaning and seed test sampling.

GOVERNMENT RIGHTS TO SEED PRODUCED AND EXCESS SEED (***May be specified in Call Order***)

The Government retains the right of first refusal for any additional amount of seed or straw produced. Price will remain the same as offered for additional amounts within 25% of the original quantity ordered. A price will be negotiated for any additional quantities that exceed 25%. The government shall notify the Contractor within two weeks following the date of receipt of contract seed test results to exercise its option to purchase excess seed or straw. The Contractor may have salvage rights to any seed or straw that is excess to the Government's needs.

If the Government decides to purchase excess seed or straw over $2,500, a call order will be submitted to the Contractor at the contract or negotiated price.

The Contractor may continue producing seed or straw from the contract planting beyond the termination of the contract at their option, and the Government will have the opportunity to negotiate, in a timely manner, a new contract for such production or the Government will release the field to the Contractor.

NOXIOUS WEEDS (may be modified to local requirements at the Call):

1. In order to prevent the potential spread of noxious weeds onto Federal lands, the Contractor shall be required to furnish the Forest Service with proof of weed-free equipment.
2. Noxious weeds are defined as any exotic plant species present or that may be introduced in the State, which may render the land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses and which is designated by the appropriate agencies having jurisdiction.
3. All equipment and vehicles to be used at the job site shall be cleaned and certified free of noxious weeds and their seeds prior to entrance onto the National Forest or other applicable Agency. The restriction shall include equipment and vehicles intended for off-road use as well as on road use, whether they are owned, leased, or borrowed by the contractor or subcontractor.
4. Cleaning shall consist of the removal of all dirt, grease, debris, and materials that may harbor noxious weeds and their seeds. This may require the use of a pressure hose. Cleaning shall occur off Federal lands.
5. Equipment, materials and vehicles shall be visually inspected by a designated Forest Service (or applicable Agency) Officer and certified in writing to be reasonably clean and weed free. Inspections will take place at a location designated by the Agency Officer in advance of equipment and material

arrival. Equipment and vehicles are expected to proceed directly to the job site following the inspection. Materials to be used on the project will be delivered to the project.

Certification shall remain valid for each identified piece of equipment or vehicle only for the duration of the specified project and only as long as the vehicle or equipment remains at the job site. Equipment and vehicles (excepting passenger vehicles - this includes pickups and vans) that leave the job site will need to be recertified as weed free before they are allowed to return to the job site or re-enter the National Forest. Equipment not passing inspection will be refused entry to the project site. Refused equipment will require re-cleaning by the Contractor at an approved off-site location at no additional time or cost to the contract. The equipment will then be re-inspected prior to entry to the project site.

SEED CROP AND STRAW QUALITY STANDARDS

Land requirements shall meet State Certification Standards for the appropriate state, which includes planting seed on clean land with the crops in distinct rows. Field history records shall be available for Government inspection. The land shall not have been recently planted to or have grown the same species being propagated under this contract to prevent contamination by volunteers of non-target seed sources.

Fields of the individual seed lots shall be isolated by a minimum of 165 feet from contaminating sources which may potentially cross-pollinate with the species being grown under this contract. If a species is known to be predominately self-pollinating, then a mechanical separation is allowed (See table below for a non-complete list of self-pollinating species). The Contractor may choose to use a larger isolation distance in order to meet State Certification Standards, or a *COR may specify the isolation distance on individual calls*.

Minimum Isolation Distance: Species listed in the following table are predominantly self-pollinating. The distance between fields of any other germplasm (seed lot) of the same species must be adequate to prevent mechanical mixture (e.g., 25 feet), unless otherwise specified on the Call order. For all other species, a minimum isolation distance of 165 feet is required, unless otherwise specified on the Call.

SPECIES CODE	SPECIES	COMMON NAME	FAMILY	MATING SYSTEM	MINIMUM ISOLATION DISTANCE
BRCA5	Bromus carinatus	California/mountain brome	Gramineae	Selfing	Mechanical
BRMA4	Bromus marginatus	mountain brome	Gramineae	Selfing	Mechanical
DASP2	Danthonia spicata	poverty danthonia	Gramineae	Selfing	Mechanical
ELEL5/SIHY	Elymus elymoides	squirreltail	Gramineae	Selfing	Mechanical
ELGL	Elymus glaucus	blue wildrye	Gramineae	Selfing	Mechanical
POSE	Poa secunda	Sandberg's/pine bluegrass	Gramineae	Selfing and apomixis	Mechanical

The Contractor shall apply for seedling and seed crop inspections with the State Certification Agency to check compliance with land requirements, isolation distances, presence of prohibited and restricted weeds,

and other standards listed in the State's Certified Seed Regulations. State inspections will be responsibility of the Contractor.

Produced seed shall meet State's Standards for Source Identified class of seed. Purity, germination, and All-State Noxious Weed examinations will be required. Tests and payment will be the responsibility of the Contractor. Samples will be tested by a state certified seed laboratory. Seed test results should include the Government's source seed lot number as specified in the call order. Test results must be satisfactory to the Government before final acceptance of the seed is made. Note: A tetrazolium test (TZ) may be made in lieu of a germination test for a seed viability test with the approval of the COR. This decision may be based on the species involved (see Exhibit 1) or time constraints.

The minimum acceptable standards for seed will be specified at the call level, but may include:

1. Seed must meet or exceed State Certification Standards for that species. Generally, where no standards exist, Kentucky Bluegrass standards shall be used for grass seed, except for *Achnatherum* and *Hesperostipa* species for which the minimum germination standards will be 50.0%.
2. Seed must be free from prohibited weed species and meet or exceed minimum standards for restriction weed seed as listed in the current State Certification Standards.
3. Seed moisture content shall not exceed 10.0%.
4. Grass seed will be de-awned.
5. Harvested and cleaned seed will be bagged and secured in 25 or 50 lb. bags made of a strong material that maintains seed viability during storage.
6. All bags shall be tagged and labeled to meet State seed law labeling requirements. Bags of seed shall also be labeled by stencil or permanent marking pens (characters at least 1 inch in size) with the Government's source seed lot number as specified on the Call order. Additional labeling information may be requested by the COR on the Call order, such as the Project Name, National Forest unit, etc.
7. Bags of seed shall be stored in a cool and dry storage facility to assure optimal viability of seed until seed delivery to the Government.

Seed lots shall be positively identified with seed lot numbers throughout sowing, all stages of grass growth, and on all packaging.

The minimum acceptable standards for straw will be specified at the call level, but may include:

1. Straw must meet or exceed State Certification Standards for weed free straw. Generally, where no standards exist, acceptance will be based on seed crop inspection reports, and/or visual field inspections by the COR prior to harvest. Standards may also be set by the Government and listed on individual call orders.
2. Straw will be baled and secured according to specifications listed on the Call order. Generally, bales will be less than 100 pounds.
3. Straw shall not be allowed to become wet after harvest or during storage prior to delivery.

SEED AND STRAW DELIVERY

Requirements will be specified at the call level, but may include:

1. Delivery for Government acceptance shall occur within 120 days of harvest date or as otherwise agreed upon by the Government. Delivery dates may also be specified on the call.
2. After the seed or straw has been determined to be acceptable, the Government will assume the financial responsibility for shipment, unless shipping charges are included in the call.

Natural Resource Studies (Professional Services Scope and NEPA Scope)

Work may include field surveys or investigations, data gathering, statistical analysis, and documentation. Resource areas may include soil, water (surface and groundwater), air, botany, fish, vegetation, range, fuels, wildlife, scenery, recreation, wilderness, wild and scenic rivers, geology, and land/special uses. Resource studies for botany, fish, and wildlife may include biological evaluation or biological assessment preparation consistent with the appropriate Forest Service manual and handbook direction.

NEPA - National Environmental Policy Act (NEPA Scope)

Includes, but not limited to:

1.1 Applicable Laws, Regulations and Policies

Some key laws, regulations and policies are included below or will be included at the call order level. This list is not all-inclusive. The Contractor must ensure compliance with all relevant laws, regulations and policies, including any local regulations.

1. National Environmental Policy Act (NEPA)
2. National Forest Management Act (NFMA)
3. Archaeological Resources Protection Act (ARPA)
4. Bald and Golden Eagle Protection Act (BGEPA)
5. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA/ Superfund)
6. Clean Air Act
7. Clean Water Act (CWA)
8. Dredged Material Management Program (DMMP)
9. Endangered Species Act (ESA)
10. Fish and Wildlife Coordination Act (FWCA)
11. Magnuson-Stevens Fishery Conservation and Management Act (MSA)
12. Migratory Bird Treaty Act (MBTA)
13. Model Toxics Control Act (MTCA)
14. National Historic Preservation Act (NHPA)
15. Alaska National Interest Lands Conservation Act (ANILCA)
16. Roadless Area Conservation Rule
17. Section 508 of the Rehabilitation Act
18. Code of Federal Regulations
19. Forest Service Handbook and Manual, accessible at: https://www.fs.fed.us/im/directives/

Public law, regulations, manuals, and handbooks referenced are subject to change. Any new legislation or changes to existing documentation are incorporated into the BPA by this reference.

2.1. Scope

The scope of the BPA includes project management support and technical support for Environmental Analysis and Decision Making (EADM) and NEPA activities such as data collection and analysis, assessments, inventories, and plan/report writing, which require specific expertise in:

a. Air Quality and Smoke Management
b. Climate Change, carbon, and greenhouse gas emissions
c. Cultural and Heritage Resource Surveys and Studies
d. Data Collection and Analysis

e. Development of Communication Site and Transmission Line Corridor Designation Plans
f. Environmental Justice
g. Fisheries and Wildlife surveys, analyses, and consultation processes
h. Forest and Project Planning Support
i. Fire Ecology and Fuels Management
j. Geographic Information System Spatial Analysis and/or Statistical Data Analysis
k. Heritage Resource Surveys and Studies
l. Lands and Special Uses
m. Landscape Analysis and Watershed Assessments
n. Litigation Support,
o. NEPA processes, procedures, and Administrative Review and Objections processes
p. Logging and Transportation System Planning
q. Logging Road Services and Road Analysis
r. Mitigation
s. Minerals and Geology
t. National Forest Management Act (NFMA) land and resource management plan compliance
u. Natural Resource Studies
v. Rangeland Management
w. Recreation, Wilderness, Inventoried Roadless Areas, Wild and Scenic Rivers
x. Scenery Management
y. Socio-Economic Studies
z. Soil Resources
aa. Terrestrial and Aquatic Invasive Species
bb. Technical Writing
cc. Travel Management
dd. Tribal Engagement and Government-to-Government consultations
ee. Vegetation Management (Timber, Silviculture, Botany, Fuels)
ff. Water Resources
gg. Public engagement, outreach, and meeting facilitation
hh. Public and agency comment analyses, organization, consideration and response
ii. Project, interdisciplinary team (IDT), and records management

2.2. General Requirements

The following general requirements apply to work performed under the BPA. Additional requirements may be included at the order level.

1. The Contractor must not perform any inherently governmental actions under this BPA.
    a. A Contractor employee must not hold himself or herself out to be a government employee, agent or representative.
    b. A Contractor employee must not state orally or in writing at any time that they are acting on behalf of the Government. In all communications with third parties in connection with this BPA, Contractor employees must identify themselves as Contractor employees and specify the name of the company for which they work. Through communicating with third parties in connection with this BPA, the Contractor employee must state that they have no authority to in any way change the BPA or order.
    c. In the event of any potential conflict or misunderstanding, the Contractor must notify the order CO immediately.

2. The Contractor must furnish all labor, personnel, supervision, equipment, materials, supplies, tools, transportation, travel, and incidentals (except those designated as Government-furnished property) to perform all work necessary for completion of orders.
3. The Contractor has the responsibility for all other data collection and reports that will be used as the basis for deliverables resulting from the orders. The Forest Service retains approval authority for these documents.
    a. All planning data, maps, files, reports, computers, audio or videotapes, and disks and other records will be collected, compiled, and made available to the Forest Service, upon request, for possible inclusion in the permanent administrative record. Once requested and delivered, all information and data collected by the Contractor and any subcontractors becomes the property of the Government regardless of the author. This information and data will be considered non-proprietary and non-confidential and subject to the Freedom of Information Act. Information exempt from disclosure under the FOIA must not be disclosed. Any data provided in support of the NEPA analysis by the non-Federal Party which they feel is confidential must be marked as such.
    b. The Contractor must not release data or information gathered under a BPA order to parties outside of the Government without advance written permission from the contracting officer.
    c. All raw data, methods, and results collected and prepared using Government funding must be delivered to the Forest Service at the conclusion of the order in an appropriate electronic format that is compatible with corporate data standards and that allows for future use by the Government.
    d. Original hard copy information such as field data collection forms and electronic data collected in the field, such as GPS files, must be delivered to the Forest Service.
    e. In addition, the Contractor must document any updates made to government furnished data as a result of field checking or other means of verification. If applicable, the Contractor must state what the updates were, what areas were affected, and why updates were made.
4. Final documents must comply with Section 508 of the Rehabilitation Act of 1973 as amended, in a format such as pdf and/or Word, and ready for posting to the Internet and/or printing and mailing if hard copy documents are needed for public distribution.

2.3. Project Management Support

For each order, the Contractor must provide project management services commensurate with the complexity of the work. Project management services under this BPA may include, but are not limited to:

a. Developing a Project Management Plan (PMP).
b. Managing all staff and staff contributions to ensure achievement of the PMP.
c. Managing subcontractors in support of order activities.
d. Obtaining and managing contractor employee access to Forest Service systems, including badging, if necessary.
e. Providing and using a commercially available system to track/log all activities. If used, the Contractor must provide credentials to Government personnel for full access to the system at any time.
f. Developing a Quality Control Plan (QCP).
g. Providing quality control of all work products and deliverables.
h. Ensuring efforts and work products conform to government standards and regulations.

i. Coordinating with government stakeholders, the public, and other contractors.
j. Developing communications and collaboration plans as well as preparing informative documents for public circulation such as news releases, legal notices, communication plans, etc. The work may include all preparation needed to conduct public meetings, scheduling, facilitation, virtual forum management, availability of meeting room, etc.
k. Documenting, consolidating, and/or analyzing results of public involvement efforts.
l. Coordinating and facilitating meetings, which may include Agency meetings, general public involvement meetings, and specific project or Forest Planning collaboration meetings. Provide notetaking and other recording as needed. Meeting management options should include both in-person as well as electronic meeting opportunities such as webinars, video conferencing or other networking/meeting technology. Meeting coordinators must be prepared to provide the Government with options and trade-offs as to various meeting formats designed to meet identified objectives and their associated costs and time commitments.
m. Managing project records and providing them to the Forest Service upon request, including maintaining all documents that may become part the official administrative record for the project until a Final Decision is signed, and through all appeal, objection, and litigation processes, if applicable. The project records must be in electronic format to the maximum extent possible. The project records must also meet the Project Record Management requirements of the Forest Service Planning Appeals & Litigation System database.
n. Providing status reports.
o. Reporting on performance.
p. Facilitating status and performance reporting meetings.
q. Providing reports on staffing and other management matters.

2.4. General Technical Support

Specific technical support and requirements will be addressed on each order scope of work.

1. In support of NEPA and EADM requirements, the Government may require technical support to:
    a. Assess – which may include determining existing conditions, trends and establishing reference documentation for landscape or project level determinations. It may include literature search, field data collection, and analyses of data and information. Assessment reports and documentation of findings may be required.
    b. Collect (Inventory) and Analyze Data – which may include maximum use of existing Agency data and information available, new data collection following established Agency protocols and methods (as defined in the Forest Handbook, Manual, or local supplements), GPS data collection, mapping, GIS work and data entry to agency standards. The inventory work may be updating an existing inventory or creating a new inventory. Analysis must be conducted using rigorous, valid analytical techniques.
    c. Analyze Content – provide services associated with receiving, processing, analyzing, storing, and summarizing public comment information or other similar content (e.g., survey responses and media content), which may require using government-provided software.
    d. Monitor – which may include designing monitoring plans for resources, projects, Forest Planning, or programs. It may include implementation of monitoring plans and/or preparing related monitoring reports.

e. Collaborate and Communicate – which may include developing and implementing collaboration and communication plans with the Forest Service, other federal agencies, and the public.
f. Plan/Write Reports – which may include technical writing or editing of documents required for support of the NEPA efforts or landscape analyses, watershed assessments, travel management, and other programs. It may include resource reports or other related reports to document procedures, findings or recommendations.

2.5. Specialized Technical Support

In conducting those efforts, the Government may order specialized technical support including but not limited to:

a. Air Quality and Smoke Management (see specific scope for details)
b. Climate Change (see specific scope for details)
c. Cultural and Heritage Resource Surveys and Studies (see specific scope for details)
d. Data Collection and Analysis (see specific scope for details)
e. Fisheries and Wildlife (see specific scope for details)
f. Forest Planning and NEPA Support
    i. Work may consist of gathering data and preparing supporting documents for Categorical Exclusions, Environmental Assessments, Environmental Impact Statements, or Forest Plan amendments or Plan Revisions. Individual tasks may require varying levels of resource analysis, field investigations, assistance to public involvement processes (including meeting coordination and facilitation), and document preparation including writing/editing and submitting documents in support of Forest Service projects. Policy and procedures contained in the regulations, Forest Service Manual and Forest Service Handbook, pertinent Land Management Plans, etc. will be the basis of the required work.
    ii. For NEPA document support, the Contractor may complete all NEPA environmental, social and economic analysis and documentation, during the timeframes associated with Forest Service identification of the proposed action through appeal and/or objection periods (all decision-making authority will be retained by the Forest Service). Specific progress checkpoints/milestones will be established by the Forest Service to facilitate approval of work completed and to assure timely completion of the NEPA document. Reports prepared by the contractor may be incorporated completely, in part, or by reference into the NEPA documents or planning files at the sole discretion of the Government. The identification of the purpose and need and the preferred or selected alternative will be completed by the Forest Service.
    iii. Work performed in support of forest planning will need to adhere to the requirements identified in the pertinent land management plans, Forest Service Manual, the Forest Service Handbook, and applicable regulations.
    iv. Work performed in support of program and project environmental analysis and decision making under NEPA will need to adhere to the requirements identified in the Forest Service Manual, the Forest Service Handbook, and applicable regulations.
g. Geographic Information System Spatial Analysis and/or Statistical Data Analysis (see specific scope for details)
h. Heritage Resource Surveys and Studies (see specific scope for details)
i. Lands and Special Uses (see specific scope for details)
j. Landscape Analysis and Watershed Assessments (see specific scope for details)

k. Litigation Support
    i. Work may include litigation support such as assembly, organization, indexing, updating, maintaining and copying of documents for the Administrative Record (AR) as necessary for lawsuits and responses to Freedom of Information Act (FOIA) requests.
l. Logging and Transportation System Planning (see specific scope for details)
m. Logging Road Services and Road Analysis (see specific scope for details)
n. Minerals and Geology (see specific scope for details)
o. Natural Resource Studies (see specific scope for details)
p. Rangeland Management (see specific scope for details)
q. Recreation, Wilderness, Inventoried Roadless Areas, Wild and Scenic Rivers (see specific scope for details)
r. Scenery Management (see specific scope for details)
s. Socio-Economic Studies and Environmental Justice (see specific scope for details)
t. Soil Resources (see specific scope for details)
u. Terrestrial and Aquatic Invasive Species (see Fish Biology & Fisheries Related Services scope for details)
v. Travel Management (see specific scope for details)
w. Vegetation Management (Timber, Silviculture, Botany, Fuels) (see specific scope for details)
x. Water Resources (see Hydrological Services scope for details)

Additionally, the call orders may include specific Agency/Regional requirements or job descriptions to meet any work categories. For example, one may include specifications as have been included below:

a) Program /Project Manager
    - The Program/Project Manager must have at least seven (7) years of demonstrated experience and be responsible for, but not limited to, managing and overseeing the preparation of assessment reports, environmental documents (including at least 3 Environmental Assessments or Environmental Impact Statements), monitoring plans, and other supporting documents required through the environmental analysis process, consistent with applicable law and regulation. The Project Manager has an extensive knowledge of and experience in the advanced concepts, principles and practices of ecosystem management and integrated forest resource planning sufficient to serve as an authority for the overall environmental analysis process.
b) Interdisciplinary Team Leader/Manager
    - An Interdisciplinary Team Leader/Manager must have at least seven (7) years of demonstrated experience and be responsible for, but not limited to, serving as a leader and supervisor for an interdisciplinary Planning Team engaged in Regional, multi-Forest, or Forest planning programs and projects (including at least 3 Environmental Assessments or Environmental Impact Statements). The Interdisciplinary Team Leader/Manager has an extensive knowledge of and experience in applying Federal and State environmental laws such as the National Environmental Policy Act (NEPA), National Forest Management Act (NFMA), and Endangered Species Act (ESA) as well as extensive knowledge and experience in developing cooperative relationships with Non-Governmental Offices (NGO's), tribes, and state and federal agencies.

c) Other Professionals Negotiated: If a state where the work is to be performed requires a license or certification, the professional proposed shall meet this requirement.

Nursery Services – General Seedling Nursery Work (Amendment 6)

Any and all services associated with a seedling nursery and greenhouse along with grading and packaging seedlings for shipment.

Some examples of tasks covered under this scope (this list is not inclusive):

1. **Spring Lift and Pack (April timeframe)** – This item involves placing the lifted bareroot seedlings into bins. These seedlings, in bins, will then be transported from the nursery fields to a location where they will need to be graded for certain specifications, bunched/counted, and packaged. This work may also include loading packaged seedlings into semi refrigerated trailer for delivery and may also include loading and grading/packaging of containerized greenhouse seedlings.
2. **Greenhouse Containerized Seedling Thinning** – This item involves removing surplus germinant and/or undesired species from each seedling container cell, so that only one seedling is remaining and preferably centered in container cell. This work can usually take place 2-3 weeks after sowing. If container blocks are moved for ease of thinning, special care needs to be taken to be sure it is returned to same location on the greenhouse bench.
3. **Bareroot Field Weeding** – This work usually involves two rounds. One in early June and another in early August. This will require removal of weeds from seedling beds. Seedling beds can contain 1-0 (seedlings sown that spring), 2-0, and 3-0+. All weeds need to be removed from fields without disturbance to seedling's root systems.
4. **Container Weeding** - Purchased, new nursery media generally comes sterile and is free of nursery pests. Occasionally, media can be exposed to events where weed seeds might contaminate mixtures, whether before the media is placed in the container or after. This work involves the removal of weeds and/or cryptograms (moss, liverworts, etc.) from container stock in the nursery without disturbance to the seedling's root system.
5. **Winter Lift and Pack – (November/December timeframe)** - This item involves grading, counting, and packaging of containerized seedlings. This work may also include loading stock trailers with seedling containers from the greenhouse on to stock trailers along with offloading the containers from the stock trailers in packing facility.
6. **Summer/Fall Lift and Pack (July-Aug or Sept- October timeframe)** - This item involves grading, counting, and packaging of containerized seedlings. This work may also include loading stock trailers with seedling containers from the greenhouse on to stock trailers along with offloading the containers from the stock trailers in packing facility.
7. **Mow Improved, Semi-Improved Grounds and Native Grassed Areas** - Grass cutting of all lawn areas must be completed as per schedule. Grass clippings must be removed or mulched when visible after mowing. All improved and semi-improved grounds and native grassed areas must look well-manicured at all times.
8. **Container filling and sowing** - Filling and sowing requires that clean containers are filled full of media ("soil" the roots grow in) and run through a machine that deposits seeds, and then having the seeds covered with a thin layer of mulch. Containers are then placed in the greenhouse. This can be a very large job depending on the size of the order, size of the greenhouses being filled, and type of species.

9. **Moving Containers-** Moving containers within greenhouses or from a greenhouse to shade structure. This may involve loading and unloading the containers on trailers, and then placing them in a different greenhouse or outdoor shade structure.
10. **Container sterilization** - After seedlings are extracted, all containers need to go through a sterilization process before being used on the next crop.
11. **Growing Environment Upkeep –** general upkeep maintenance of the growing facilities and fields that would be associated with services as defined by the FAR and 29 CFR 4.107. Some tasks this may include, but not limited to, are: maintenance of wells, pumps, and backflow prevention, as well as troubleshooting greenhouse control systems and possible electrical issues.
12. **Tree Cooler Maintenance and Servicing –** See the specific scope that covers this service.
13. **Seedling Transportation** – General requirements will be specified in the Call, but typically include the use of refrigerated trucking companies to or from Nursery locations.

All items include clean up and quality control requirements. Loading and unloading of transported items may require the use of a forklift. Requirements for personnel and standard operations will be specified at the call level.

Pack and Saddle Stock Mobilization and Assistance (Amendment 6)

Pack and Saddle stock may be used to transport personnel, supplies (including explosives) and gear to backcountry work sites.

Pack Stock may be utilized to drop camps and deliver supplies. Use of pack string to transport camp gear, food, tools and other supplies to support backcountry trails projects. Arrangements for trips in and backhaul trips would be scheduled in advance unless in an emergency. Gear/materials would be delivered to a pre-arranged location where the packer would be responsible for secure packing and transport to site.

They may also be used for explosives hauling. Use of pack string to deliver explosives to work site. Certified blaster must pack the explosives and detonators (on separate reliable animals just before departure) with assistance from packer according to the Forest Service "Guide for Using, Storing, and Transporting Explosives and Blasting Materials". Certified blaster shall accompany the pack string in order to be present with the materials at all times. Travel shall be limited to one half hour after sunrise and one-half hour before sunset.

Saddle Stock may be utilized as riding animals to provide transport for personnel (employee or partner) provided that riders are experienced and animals are in good physical condition, well-shod and well-trained for trail use, gentle, and have been worked recently. Saddles and tack will be provided and adjusted for each animal and rider. Packer/outfitter will monitor riders and animals during the trip and correct unsafe conditions.

The Government may require that the Contractor has commercial licenses, safety licenses, commercial guides licenses, etc. to adequately demonstrate expertise.

Paleontological Services (Professional Services Scope)

This may include, but is not limited to Surveys, Reports, Summaries, and Research involving paleontological findings. Contractor may be asked to provide Project Descriptions of the proposed project, emphasizing potential impacts to paleontological resources. Include overview of known paleontological information, institutions consulted, previous surveys in the area, previous projects of similar nature in the area, and general description of survey techniques employed. Extent of survey coverage, providing total acres of pedestrian survey and non-survey. Include criteria used to determine significant vs non-significant localities.

Describing each locality separately and providing information on topographic location, formation, fossil description, and preservation. Potential impacts to paleontological resources resulting from the project. Detailed mitigation recommendations that may lessen potential adverse impacts, including any areas where monitoring during construction is recommended. Listing of any collected material, including field numbers, field identifications, and elements, cross-referenced to locality field numbers. This list may be submitted in electronic format, preferably in spreadsheet format. Identify potential fossiliferous areas to allow for future assessment of sites if applicable. Map the project area, indicating areas surveyed, areas not surveyed, previously identified localities, and new discoveries. Provide relevant photos, diagrams, tables to aid in explaining, clarifying, or understanding the findings.

Paralegal Services (Professional Services Scope)

The Contractor shall provide litigation, discovery, FOIA, and other information gathering and support services to requesting offices within the Department in specific and general support of legal actions and related matters or other information management matters. The support required by this contract encompasses those services necessary to enable personnel to collect/acquire, organize, develop, analyze, review, produce, and/or present information, data, evidence or legal analyses under the direction and guidance of a government attorney, or at the direction of a paralegal specialist who is under the direction of a government attorney. When required by task order or technical direction, the Contractor shall organize materials and make them available via a secure Web-based document repository. Includes, but not limited to paralegal services pertaining to the following areas of law: Government contracts; environmental compliance; employee and labor relations; ethics; Equal Employment Opportunity (EEO); Freedom of Information Act (FOIA) and Privacy Act; Energy Employee Occupational Illness Compensation Program (EEOICPA); document requests, including but not limited to litigation discovery requests; site closure preparation; and any judicial or administrative litigation related to the above mentioned areas.

Pest Control Services (Amendment 4)

All services include the extermination/pest control of insects, animal pests, or other pests that may periodically present a problem, such as spiders, crickets, centipedes, rats, mice, roaches, ants, silverfish, bedbugs, fleas, mosquitos, weevils, cereal or flour beetles, moths, carpet beetles, termites, or other fabric pests. This also includes vegetation and tree pests, such as mountain pine beetles, emerald ash borer, etc.

This service may also include eradication of animal pests such as skunks, moles, gophers, pigeons, starling and bats if services cannot be performed by the local municipal animal control. Extermination procedures are required to be performed in the exterior of the building as well as the interior.

Pesticide Risk and Effects Analysis (Professional Services Scope)

Compile description of proposed pest management - "pests" include native and non-native insects, pathogens, and non-native fish, mammals, or plants. Identify treatment methods, pesticides needed for chemical methods, acres of needed treatment on an annual basis, identify of pests (including specific invasive plants and/or other species), and include issues related to the needed management. This will require consultation with the project manager and possibly various specialists including but not limited to the Regional Pesticide Use Coordinator/Technical Specialist, Fisheries and Wildlife Biologists, Hydrologists, Soil Scientists, Botanists, Entomologists, and Pathologists.

Complete analyses and planning for addressing pests, including pesticide needs, treatment descriptions, pesticide effects to non-target resources including, but not limited to, workers and general public, water

quality, non-target plants, and fish and wildlife, the scope, scale and likelihood of any adverse effects, management options and recommendations.

Document will be professional quality free of typographical errors, contain analysis sufficient to support recommendations, and be clear and concisely written. Full content and format of analysis will be agreed upon prior to writing and submitting draft documents. Draft and final document(s) will be provided to Regional Invasive Plant Program Manager (COR's Technical Specialist) for review, correction and final approval.

Plant Material Collection / Inventory / Mapping (Natural Resource Restoration Scope)

Seed Collection/Inventory/Mapping/Seed Cleaning. Services may be required in part or whole depending on project requirements. Identify and collect phenologically appropriate native tree, shrub, fem, forb, grass-like, and grass seed from a wide range of ecological settings. Collection sites may be remote requiring significant driving and/or hiking. Sites may also be along heavily traveled highway corridors.

Table 1. Example of standards. Individual Call orders will specify.

Rough cleaned seedlots shall meet the following minimum standards:

Species Class	Purity[1] (min % by weight)	Noxious Weeds[2] (max %)	Non-target Species (max %)
Graminoids	90	0	0.3
Forbs	90	0	0.2
Shrubs	90	0	0.5

[1] Seedlots with less than 90 percent pure seeds shall receive a reduced payment in accordance with Section 9 Payments.
[2] Oregon Seed Certification Service Handbook, Section V

Inventory and mapping may involve locating, identifying, evaluating, and recording potential collection sites, species, and phenology progression. A typical project for example may first involve the contractor performing a 5-6 species inventory and mapping exercise, followed up with seed collections over a range of elevations and habitats, cleaning and seed testing.

Vegetative Collection/Salvage/Inventory/Mapping. Services may be required in part or whole depending on project requirements. Identify and collect phenologically appropriate native hardwood, shrub, forb, fem, grass-like, and grass vegetative plant materials from a wide range of habitats and conditions. Collection sites may be remote requiring significant driving and/or hiking. Sites may also be along traveled highway corridors. Inventory and mapping involve locating, identifying, evaluating, and recording potential collection sites, species, and phenology. Post collection material handling, storage and transport may require refrigeration and/or overnight delivery. Long term cold storage (2-4 months) may be required prior to nursery planting.

Collection requests for vegetative materials, for example, may vary from small twigs to rhizomes to large poles depending on project design.

Plant Propagation (Natural Resource Restoration Scope)

Provide nursery services and facilities sufficient to propagate, produce, and track a wide variety of tree, shrub, fern, grass, grass-like, and forb species from seed and/or vegetative means providing an array of container and/or bare-root configurations. The Contractor's growing facility may be required to be located within specific geographic ranges, depending on project location and need. Delivery to project sites may be requested, necessitating appropriate transportation and storage equipment, such as mobile refrigeration.

Container requests may range from small volume plugs to 5 gallon or larger. Depending on project needs, bareroot plant stock or balled-and-burlapped or a tree spade may be required.

Due to the uncertainties involved with many projects scheduled delivery dates of plant materials for a specific project may occasionally need to be modified. This may involve delaying delivery(weeks-months), changing container configuration and/or production strategy to accommodate an additional year of growth, or over wintering in a secure facility. The Government may provide all plant materials, a portion of, or none to the grower.

Professional Tree Services

Professional Tree Services may include a variety of tree or vegetation trimming, removal, or maintenance in a variety of settings. The following are examples of that may be included in this scope:

1. Tree Removal: Safe and efficient removal of trees, whether due to disease, storm damage, or other reasons.
2. Tree Pruning/Trimming: Trimming and shaping trees for health, and safety.
3. Tree Planting: Planting new trees to promote reforestation or improve landscaping.
4. Tree Condition and Risk Assessment: Evaluating the health of trees, diagnosing diseases or issues (including structural defects, soil, erosion, etc.), and recommending appropriate treatments. Evaluating the risk trees may pose and recommending appropriate treatments.
5. Tree Disease and Pest Control: Management and treatment of tree diseases and infestations by pests.
6. Emergency Tree Services: Responding to storm damage or fallen trees, often on an urgent basis.
7. Arborist Services: Certified arborists may provide specialized expertise in tree care and management.
8. Land Clearing. Clearance of trees and woody debris; Debris storage, staging and removal
9. Stump Grinding/Removal: Removing tree stumps to prevent regrowth and create a more usable landscape.
10. Mulching: Spreading mulch around trees to conserve moisture and improve soil health.
11. Tree Inventory and GIS Mapping: Documenting and mapping trees for urban planning or conservation purposes.
12. Tree Protection/Preservation Planning: providing guidance on protecting trees during construction.
13. Consultation and Advice: Offering expert advice on tree care.
14. Tree Chipping/Tree Chipping in place: A process of turning tree branches or entire trees into woodchips. Wood chips remain in place.

Project Management (Project Management Scope)

Includes the following:

- Project management
- Natural resource management
- Fire management
- Aviation
- Facilitation
- Research
- Analysis
- Policy

- Strategic planning
- Cooperative partnerships
- Coaching
- Meetings management
- Emergency/risk management
- Training & Education
- Tactical operations
- Other skills relevant to agency's mission

Scopes of work include, but not limited to:

- Restore resilient landscapes
- Increase the number of fire-adapted communities
- Provide safe and efficient wildfire response
- Fuels management
- Managing wildland fires
- Creating organizational resiliency
- Assessing risk and human factors
- Developing doctrine
- Managing aviation assets
- Long-term strategy formulation
- Improving tactical operations
- Providing support to non-fire emergency management activities
- Building partnerships
- Workforce issues
- Smoke management and air quality
- International fire management assistance
- Research
- Training & Education
- Public policy
- Budget management

The contractor may be required to furnish all personnel, facilities, equipment, materials, supplies, and services, and incidentals (except those designated as government-furnished property). The contractor has the responsibility for ensuring that all deliverables for all tasks under this contract are complete, accurate and delivered according to established schedules and budgets. The Forest Service retains the authority for review, comment, and acceptance.

Conference planning – Assists with development of workshops, meetings, and conferences. Consulting – Provides expert advice, assistance, guidance, or counseling in support of the USFS, organizational, and business improvement efforts.

Facilitation – Works with project lead in developing agendas and creating support documentation.

Information Technology – Assists in the development of communication and information materials through appropriate protocols.

Media and public information – Assist in the development of materials for distribution to the media and general public through appropriate protocols.

Program/Management Analyst – Works closely with project lead in performing a variety of assigned duties, including analysis, gathering analyzes and synthesizing information using evaluation and critical thinking skills.

Technical Writer/Editor – Writes, edits and reviews complicated subject matter in the form of manuals, brochures, articles, reports, etc.

SECURITY REQUIREMENTS:

The Contractor/Cooperator and other external organizations (hereafter called Contractor) utilizing Information Technology (IT) systems of an agency agrees to comply with the applicable IT security policy for that agency. The Contractor and other external organizations will be responsible for IT security for all systems connected to the Forest Service network or operated by the Contractor and other external organizations for the Forest Service, regardless of location. This is applicable to all or any part of the contract that includes IT resources or services in which the Contractor and other external organizations must have physical or electronic access to Forest Service sensitive information that directly support the mission of the Forest Service. The term "information technology", means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. This includes both major applications and general support systems as defined by OMB Circular A-130.

The Contractor shall be responsible for properly protecting all information used, gathered, or developed as a result of work under this task. The Contractor shall also protect all unclassified Government data, equipment, etc., by treating information as sensitive business, confidential information, controlling and limiting access to the information, and ensuring the data and equipment are secured within their facility.

The Contractor or other external organization will not publish or disclose in any manner, without the Forest Service Contracting Officer's written consent, the details of any programs, documentation, data, or safeguards either designed or developed by the Contractor or other external organization under this Contract or otherwise provided by the Government. The Contractor, and all employees assigned to any part of this contract may be required to sign non-disclosure or other appropriate security agreements. A written agreement between the Forest Service and any contractors and other external organizations will be entered into before Forest Service data and information otherwise exempt from public disclosure may be disclosed to the contractors and other external organizations. The Contractor and other external organizations will agree to establish and follow security precautions considered by the Forest Service to be necessary to ensure proper handling of data and information. All documents and data produced for this project are the property of the U.S. Government and cannot be reproduced or retained by the Contractor. All data is the exclusive property of the U.S. Government and shall be surrendered by the Contractor, along with all supporting documentation within 10 days of receipt of a written demand from the Contracting Officer.

To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the Contractor will afford the Government access to the Contractor's or other external organization's facilities, installations, technical capabilities, operations, documentation, records, and databases. The Contractor will cooperate with Federal agencies and their officially credentialed representatives during official inspections or investigations concerning the protection of Forest Service information. Cooperation may include providing relevant documentation showing proof of compliance with Federal and agency requirements and rendering other assistance as deemed necessary.

DATA RIGHTS

The Forest Service will retain ownership of all content produced and the delivery of content produced. All final written material, maps, electronic data, and artifacts collected or generated from this procurement are considered property of the United States Government and will be submitted to the Forest Service COR with the final report at the conclusion of the task.

All computer files generated or gathered as a result of the contract must be deleted from all non-federal computers used by the contractor or their subcontractors immediately following submission of the final report.

All raw data, methods, and results collected and prepared using Government funding must be delivered to the Forest Service at the conclusion of the contract in an appropriate electronic format that is compatible with corporate data standards and that allows for future use by the Government. Original hard copy information must be delivered to the Forest Service. In addition, the Contractor must document any updates made to Government furnished data as a result of the contract. If applicable, the Contractor must state what the updates were, what areas were affected, and why updates were made.

All planning data, maps, files, reports, computers, audio or videotapes, and disks and other records will be collected, compiled, and made available to the Forest Service, upon request, for possible inclusion in the permanent administrative record. Once requested and delivered, all information and data collected by the Contractor and any subcontractors becomes the property of the Government regardless of the author. This information and data will be considered non-proprietary and non-confidential and subject to the Freedom of Information Act (FOIA). Information exempt from disclosure under the FOIA must not be disclosed.

PROGRAM/PROJECT MANAGER (KEY PERSONNEL)

Oversees specific projects on behalf of agency personnel and maintain project cost, schedule and performance data. Meet regularly with government program managers and advise them on deliverables and issues on the project. Consult with and advise government management and serve as advisors providing the analytical guidance required for completion of government projects. Facilitate overall strategy development at the project and program levels. Requires one year of project management experience. Must have demonstrated ability in effective oral and written communication, planning, leadership, and operational skills. Requires one year of project management experience. Must have demonstrated ability in effective oral and written communication, planning, leadership, and operational skills.

PROGRAM/MANAGEMENT ANALYST I

Works closely with project lead in performing a variety of assigned duties, including analysis, gathering analyzes and synthesizing information using evaluation and critical thinking skills. Assists with work breakdown structures, prepares charts, tables, graphs, and diagrams to assist in analyzing problems. This position requires demonstrated proficiency using commercial automated word processing, graphics systems, and desktop publishing systems. Good written and oral communication skills are required.

PROGRAM/MANAGEMENT ANALYST II

Under general supervision this position will support and assist project team members in the execution and implementation of a variety of project tasks particularly by providing analytic and technical support.

Completes research and analysis, gathers analyzes and synthesizes information using evaluation and critical thinking skills. Assists with work breakdown structures, prepares charts, tables, graphs, and diagrams to assist in analyzing problems. Assists with the development of technical and project requirements. Must have demonstrated the ability to work independently or under only general direction.

This position requires demonstrated proficiency using commercial automated word processing, graphics systems, and desktop publishing systems. Good written and oral communication skills are required.

PROGRAM/MANAGEMENT ANALYST III

Works as a team member with advanced, comprehensive knowledge of methodologies, principles and practices related to logistics, business, or financial management disciplines. Completes research and analysis, gathers analyzes and synthesizes information using evaluation and critical thinking skills.

Ability to organize, analyze, interpret, and evaluate financial and management data in the solution of financial management and accounting problems. Ensures compliance with technological standards throughout the project. Operates with considerable latitude for actions and decisions. Must have demonstrated the ability to work independently or under only general direction. This position also requires demonstrated proficiency using commercial automated word processing, graphics systems, and desktop publishing systems. Good written and oral communication skills are required.

CONFERENCE PLANNER I

Assists with development of workshops, meetings, and conferences. Responsible for assisting in coordinating logistics for these events during the planning and execution stages. Assignments may require completion outside normal hours of operation of the Center and in the accompaniment of Center personnel. For example, accompanying staff to workshop on a weekend that the contractor staff member has assisted in developing.

Possesses limited experience and exercises limited judgment with commonly used concepts, practices, protocols, and procedures within the event planning or hospitality field. Relies on limited experience and judgment to plan and accomplish tasks. A limited degree of creativity and latitude is required. Completes all assignments in a professional and independent manner. Primary job functions require a limited degree of work independence and judgment

CONFERENCE PLANNER II

Assists with development of workshops, meetings and conferences. Responsible for coordinating logistics for these events during the planning and execution stages. Task orders for this labor category may require assignments to be completed outside the normal hours of operation of the Center in the accompaniment of Center personnel. For example, accompanying staff to workshop on a weekend that the contractor staff member has assisted in developing. Possesses moderate experience and exercises moderate judgment with commonly used concepts, practices, and procedures within the events planning or hospitality field. Relies on moderate experience and judgment to plan and accomplish tasks. A moderate degree of creativity and latitude is required. Completes all assignments in a professional and independent manner. Primary job functions require a moderate degree of work independence and judgment in the performance of a variety of tasks.

CONFERENCE PLANNER III

Assists with development of workshops, meetings and conferences. Responsible for coordinating logistics for these events during the planning and execution stages. Task orders for this labor category may require assignments to be completed outside the normal hours of operation of the Center in the accompaniment of Center personnel. For example, accompanying staff to workshop on a weekend that the contractor staff member has assisted in developing. Possesses a high degree of experience and exercises professional judgment with commonly used concepts, practices, and procedures within the events planning or hospitality field. Relies on a high degree of experience and judgment to plan and accomplish tasks. A high degree of

creativity and latitude is required. Completes all assignments in a professional and independent manner. Primary job functions require a high degree of work independence and judgment in the performance of a variety of tasks.

CONSULTANT

General duties will include providing expert advice, assistance, guidance or counseling in support of the Agency, organizational, and business improvement efforts, including providing advice to senior management related to development and resolution of program and management issues. Must have the ability to analyze problems, evaluate the contents of written information, and apply sound judgment to resolve problems or offer alternative solutions to management. Responsibilities include workflow analysis, planning, change process, and systems implementation.

Prepares evaluation statements, reports of findings, and supporting documentation.

DATA ANALYST

General duties include data entry into government-specific software, review, and follow-up of database entries for tracking and proofing/verification, and report generation and error checking as needed. This position requires accuracy in data entry, so attention to detail is important; the ability to meet crucial deadlines; the ability to work with numbers, financial information/documents; the ability to generate reports from government-specific software programs; and the ability to proofread and correct errors on financial reports for accuracy.

DATA SPECIALIST

This position will include a demonstrated capability of maintaining a variety of data products, chronological data status and logs. Works independently or under general direction to conduct logical analyses and provide assessments of current logistical practices and recommends possible solutions. Review's operations and testing of models to ensure adequacy or to determine need for reformulating to support collection, manipulation, analysis, and other use of data.

DATA VALIDATOR

Duties may include responsibility for data validation related activities, including the evaluation of data standards and data consistency and quality. Identifying and coordination of validation issues for data and related systems and ensuring compliance with policies and procedures are adhered to. Must possess excellent organizational and interpersonal communication skills and be able to adapt quickly to changing priorities. Must be able to troubleshoot work and perform in a high paced, tight deadline environment.

FACILITATOR I

Works with project lead in developing agendas and creating support documentation. This position will require the capability of coordination of meetings, trainings, and providing meeting recommendations and support including logistics planning, note taking, and meeting closure and summary reports.

FACILITATOR II

In addition to Facilitator I duties, these tasks may require the ability to plan, lead and provide for facilitated discussions and meetings. Assist groups in productively discussing key issues. Provides interpretation and recommendations to aid in understanding and responding to meeting/session outcomes.

FACILITATOR III

In addition to Facilitator I and II duties, these tasks may include facilitation & related decision support services in collaboration efforts, working groups, or integrated product, process, or self-directed teams. Compile, organize and articulate ideas and recommendations to advisory groups and the public, and apply sound judgment to resolve problems or offer alternative solutions to management. Analytical skills necessary to assist with special policies, situations, and issues as they arise. Experience in planning, coordinating and facilitating meetings of various entities and government officials. Ability to effectively produce and distribute meeting information for the advisory and decision-making body.

INFORMATION TECHNICIAN I

Assists in the development of communication and information materials through appropriate protocols. This may include assisting in the development of communications strategies and collaborative relationships with appropriate groups, as well as coordinating and assisting with the implementation of specific outreach activities and products (e.g., written materials, website content, exhibits, workshops, and events). Submits written material as requested. Possesses knowledge in writing commercial electronic or written media in the area of science or related program issues. Performs a variety of general tasks.

Completes all assignments in a professional and independent manner. Primary job functions require a limited degree of work independence and judgment.

INFORMATION TECHNICIAN II

Assists in the development of communication needs and information materials through appropriate protocols. Submits written material as requested. This includes assisting in the development of communications strategies and collaborative relationships with appropriate groups, as well as coordinating and assisting with the implementation of specific outreach activities and product s (e. g. written materials, website content, exhibits, workshops, and events}. Submits written material as requested. Possesses limited to moderate degree of experience and knowledge in writing commercial electronic or written media in the area of science/program or related issues. Performs a variety of moderate to complex tasks. Completes all assignment s in a professional and independent manner. Primary job functions require a moderate e degree of work independence and judgment.

INFORMATION TECHNICIAN III

Assists in the development of communication and information materials through appropriate protocols. Assists in the planning and development of written information materials that can be effectively understood by the intended audience (of varying degrees of scientific/program knowledge), including the general public, children, policy makers, other scientists, etc. Work with other members of an established communications team, subject matter experts, and Center scientists and staff. Submits written communication products as requested. These written materials include brochures, newsletters, briefing papers, website content, and press releases. Prepare written communication materials in prescribed formats or formats developed collaboratively with staff. The ability to clearly and accurately translate and express complex issues in a variety of writ ten forms is a requirement. High degree of familiarity with writing commercial electronic or writ ten media in the area of science/program or related issues. Performs a variety of specific and complex tasks. Completes all assignments in a professional and independent t manner. Primary job functions require a high degree of work independence and judgment.

MEDIA SPECIALIST I

Assists in the development of materials for distribution to the media and general public through appropriate protocols. Submits written material as requested. Has knowledge of commonly used concepts, practices,

and procedures within the communications and/or journalism field. Relies on instructions and pre-established guidelines to perform the functions of the job. Performs a variety of program casks/assignments. Assignments may require completion outside normal hours of operation requested.

Has knowledge of commonly used concepts, practices, and procedures within the communications and/or journalism field. Relies on instructions and pre-established guidelines to perform the functions of the job. Performs a variety of program casks/assignments. Assignments may require completion outside normal hours of operation of the Center and in the accompaniment of Center personnel. For example, accompanying the Center Outreach Specialist to a media event on a weekend so that the contractor can gather information to submit in writing. Knowledge, use, and skill with digital cameras for picture taking is required, i.e., to focus, center, provide simple routine levels of digital photography in situations where several shots can be taken. Must possess knowledge of HTML. Completes all assignments in a professional and independent manner. Primary job functions require a limited degree of work independence and judgment.

MEDIA SPECIALIST II

Assists in the development of materials for distribution to the media and general public through appropriate protocol s. Submits written material as requested. Possesses moderate familiarity with standard concepts, practices, and procedures within the communications and/or journalism field. Relies on limited experience and judgment to plan and accomplish tasks. A moderate degree of creativity and latitude is required. Performs a variety of program tasks/assignments. Assignments may require completion outside normal hours of operation of the Center and in the accompaniment of Center personnel. For example, accompanying the Center Outreach Specialist to a media event on a weekend so that the contractor can gather information to submit in writing. A moderate degree of knowledge, use, and skill with digital cameras for picture taking is required, i.e., to focus, center, provide simple routine to moderate levels of digital photography in situations where several shots can be taken. Must possess knowledge of HTML. Completes all assignments in a professional and independent manner. Primary job functions require a moderate degree of work independence and judgment.

MEDIA SPECIALIST III

Assists in the development of materials for distribution to the media and general public through appropriate protocols. Submits written material as requested. Possesses a high degree of familiarity with standard concepts, practices, and procedures within the communications and/or journalism field. Relies on a higher degree of experience and judgment to plan and accomplish goals. A wide degree of creativity and latitude is required. Performs a variety of complex program tasks/assignments. Assignments may require completion outside normal hours of operation of the Center and in the accompaniment of Center personnel. For example, accompanying the Center Outreach Specialist to a media event on a weekend so that the contractor can gather information to submit in writing. A high degree of knowledge, use, and skill with digital cameras for picture taking is required, i.e., to focus, center, provide moderate to advanced skill level digital photography in situations where several shots can be taken. Must possess knowledge of HTML. Completes all assignments in a professional and independent manner. Primary job functions require a high degree of work independence and judgment.

TECHNICAL WRITER/EDITOR I

Writes, edits and reviews complicated subject matter in the form of manuals, brochures, articles, reports, etc. Tasks may also include obtaining technical data from independent observation, reviews with staff members, and/or studies of published materials and existing documentation.

TECHNICAL WRITER/EDITOR II

Writes, edits and reviews complicated subject matter in the form of manuals, brochures, articles, reports, etc. Tasks may also include obtaining technical data from independent observation, reviews with staff members, and/or studies of published materials and existing documentation.

TECHNICAL WRITER/EDITOR III

Researches, writes, and edits materials for related manuals, briefs, proposals, instructional material, catalogs, technical publications, and reports. Obtains data from independent observation, review with staff members, and/or studies of published materials and existing documentation. Interfaces with users, specialists, analysts, programmers, etc., to obtain background business/ technical information, methods, and standards. Revises text and recommend changes in scope, format, and content to ensure conformance with established standards. May edit, standardize, or make changes to material prepared by other writers. Performs final quality assurance on all materials.

Rangeland Management (Professional Services Scope and NEPA Scope)

PROFESSIONAL SERVICES

Perform the necessary components of rangeland resource inventory, analysis or monitoring.

Gather field data to analyze effects of proposed management activities on the rangeland ecosystem.

Evaluate and assess the environmental impact of various management practices on a rangeland and ecosystem management applicable to rangeland management, grazing systems, and improvements. Inventory, analysis or monitoring shall be conducted in compliance with policy and guidance contained in Forest Service Manual and handbooks, 2200 Series and any other pertinent information provided by the Forest Service OR relevant Agency-specific policy and guidance.

Collect sufficient field information to assess the existing conditions of the rangeland resources (range condition and trend) for the project area.

NEPA

Rangeland Management Specialists employed by the Contractor will be used to perform the necessary components of rangeland resource inventory, analysis or monitoring. The contractor may be tasked with gathering field data to analyze effects of proposed management activities on the rangeland ecosystem and developing management plans for wild horse and burro populations.

The contractor may be tasked with collecting sufficient field information to assess the existing conditions of the rangeland resources (range condition and trend) for the project area.

The contractor must demonstrate knowledge of ecological processes and the skill to evaluate and assess the environmental impact of various management practices on a rangeland ecosystem.

The contractor must demonstrate knowledge in the principles, concepts, and practices of rangeland and ecosystem management applicable to rangeland management, grazing systems, and improvements. Inventory, analysis or monitoring must be in compliance with policy and guidance contained in the Forest Service Manual and Handbooks and any other information provided by the Forest Service in the order.

Records Management (Professional Services Scope)

Work includes the following: Identify records by Forest Service/BLM/NPS file codes and retention schedules, prepare Forest Service/BLM/NPS records, to include maintenance (such as inventorying and scanning documents) and disposition (coordinate with Forest Service/BLM/NPS records management staff). Convert

hard copy files into electronic files with corresponding file structure (to include but not limited to survey and site files).

All planning data, maps, files, reports, computers, audio or videotapes, and disks and other records will be collected, compiled, and made available to the Forest Service, upon request, for possible inclusion in the permanent administrative record. Once requested and delivered, all information and data collected by the Contractor and any subcontractors becomes the property of the Government regardless of the author. This information and data will be considered non-proprietary and non-confidential and subject to the Freedom of Information Act. Information exempt from disclosure under the FOIA must not be disclosed. Any data provided in support of the NEPA analysis by the non-Federal Party which they feel is confidential must be marked as such.

Managing project records and providing them to the Forest Service upon request, including maintaining all documents that may become part the official administrative record for the project until a Final Decision is signed, and through all appeal, objection, and litigation processes, if applicable. The project records must be in electronic format to the maximum extent possible. The project records must also meet the Project Record Management requirements of the Forest Service Planning Appeals & Litigation System database.

Recreation (Professional Services Scope and NEPA Scope)

PROFESSIONAL SERVICES

Work elements in this area may include the following items:

- Describe the amount and type of recreation use in the project area based upon market research and analysis.
- Identify and locate recreation facilities.
- Develop conceptual alternative recreation site configurations for client review.
- Design recreation sites.
- Incorporate Built Environment Image Guide principles to meet the needs of client/visitor groups, including the needs of specific cultural/ethnic groups.
- Incorporate use of Universal Design principles to address the facility and program needs of the physically challenged.
- Develop management plans for recreation management areas including Scenic Areas, National Recreation Areas, Special Interest Areas, Monument Areas, or Congressionally-designated areas.
- Determine trail locations and provide trail construction details.
- Develop scenic byway corridor plans and associated infrastructure improvements.
- Provide design of visitor information signs, directional signs or interpretive signs.

NEPA - RECREATION, WILDERNESS, INVENTORIED ROADLESS AREAS, WILD AND SCENIC RIVERS

The contractor must be knowledgeable of forest recreation resources and related natural resource fields sufficient for the compilation, evaluation, and analysis of information concerning developed and dispersed recreation, travel management, and wild and scenic rivers, wilderness, and wilderness inventory evaluations.

The contractor must have comprehensive knowledge of laws, regulations, and agency land management policies and procedures governing the use and development of recreational resources on Federal land in order to analyze effects of proposed management activities on recreation, wild and scenic rivers, wilderness, and inventoried roadless area resources.

Work may include:

- Collecting sufficient field information to assess the existing condition of recreation facilities (dispersed and developed), wild and scenic rivers, wilderness areas, and inventoried roadless area resources.
- Describing the amount and type of recreation use in the project area based upon market research and analysis.
- Identifying the location of new recreation facilities and opportunities.

Work may require analysis of wilderness attributes and inventoried roadless area characteristics that may be affected by program or project activities consistent with requirements under the 2001 Roadless Area Conservation Rule or state-specific rule, as appropriate. In addition, wild and scenic river outstanding remarkable values identified in Forest Plan and river management plans may also require analysis where proposed activities may affect the outstanding remarkable values.

Other work related to wild and scenic rivers may include assistance with the development of Comprehensive River Management Plans, and in the analysis of rivers to determine if they are eligible and/or suitable for Wild & Scenic River designation.

Road Decommissioning / Obliteration / Soil De-Compaction (Natural Resource Restoration Scope and Amendment 4)

Provide services to de-compact soils, decommission, obliterate, enhance, re-contour and/or shape roads, source and waste areas, landings, skid-trails, temporary roads, etc., pull culverts, improve drainage, restore hydrologic function, create barriers to discourage further use, etc. Work may involve transporting (on and off-highway), placing materials such as soil, rock, logs, slash, etc. to and/or from the site and disposal. Additional services may include whole tree removal (tree-tipping), transport, and placement.

Subsoiling is a restoration technique used in heavily impacted soils to reduce compaction (soil strength/bulk density), increase macropore space/permeability/infiltration, and improve overall growing conditions. Subsoiling is the technique of mechanically loosening heavily compacted soils to a minimum depth that will vary per location/call order, grasping and lifting soil and setting it back in place. The operator may be required to de-compact the soil without mixing layers or pulling up rocks. The lifted soil would then be gently placed back into position. If large rocks or roots are encountered the subsoiler will de-compact to a lesser depth to avoid damaging the root structure of trees. The organic rich duff layer shall remain largely unmixed on the top layer for soil surface protection. Contractor may be asked to subsoil areas detrimentally compacted during emergency operations, on temp roads- primary skid trails, and landings at locations specified by the Forest Service. Specific areas to treat within each project area may need to be expressly identified on unit maps that will be provided to the contractor prior to the commencement of work. Anticipated acreages of subsoiling treatment are specified for each unit in the Schedule of Items.

Scenery / Visual Resource Management, Impact Assessment, Mitigation Realm (Professional Services Scope and NEPA Scope)

PROFESSIONAL SERVICES

Conduct analysis for scenery and visual resources. Describe current landscape characteristics, including a description of the ecological unit, landscape attributes and the landscape's relative scenic attractiveness.

Describe the area's scenic integrity, including historic or past integrity, any interim short term integrity levels necessary to reach a long-term goal, and an expression of the landscape's "desired condition."

Collect information regarding the constituent(s), including a constituent inventory and analysis; information sources and use of constituent surveys. Determine landscape visibility including the identification of travel ways and use areas, constituent concern levels, "seen" areas, distance zones and scenic classes.

Conduct ecosystem analysis, planning and implementation, alternative development, evaluation and selection, achievement of landscape character goals, and monitoring.

NEPA

Depending on the forest, either the Scenery Management System (SMS) or Visual Quality Objectives (VQO) process may be required, as determined in the order.

In general, both analysis processes will require the current landscape character to be described, including a description of the ecological unit, landscape attributes and the landscape's scenic attractiveness. Work may include describing the area's scenic integrity, including historical or past integrity, any short-term integrity levels necessary to reach a long-term goal, and description of the landscape's "desired condition".

Work may include collecting information, including inventory and analysis, review sources, and identification of travel ways and areas of use, public concerns, distance zones and scenic classes.

Work may include conducting ecosystem analysis; planning and implementation; a development, evaluation of alternatives and selection of the preferred alternative; achievement of landscape character goals; and monitoring.

Sediment / Erosion Control and Dust Abatement (Natural Resource Restoration Scope)

Design and implement sediment and erosion control plans for highway, trail, or energy corridor construction projects. Implement an already existing control plan or provide advice on design, implementation, or improve existing plans. Provide, install, or place control devices, such as erosion control bales, wattles, logs and rolls, silt fence, temporary rolled erosion control products both short and long term, temporary mulching/seeding, check dams, settling ponds, basins, bio-filtration, geo-textiles, and geo-composite materials, etc., sufficient to meet all local, state and federal regulatory requirements. Work may involve "on-call" duties and storm patrols.

This scope may also include Dust Abatement/Control and Material Stabilization which may include – but is not limited to:

- **Sprinkling/irrigation**
- **Vegetative cover**
- **Mulch**
- **Wind breaks**
- **Tillage**
- **Stone**
- **Chemical soil stabilization (palliatives)**

Slash Shredding / Disposal / Hauling / Mechanized Burning (Natural Resource Restoration Scope)

Provide mobile equipment that can efficiently reduce slash into shred form of varying sizes for use in creating compost or used as mulch on constructed cut and fill slopes, decommissioned roads, etc., as well as for erosion control, bio-engineering, etc. Provide equipment which can size, sort, or screen out and separate

product as needed. For example, produce material for mulch blowing applications to a specific maximum size. Source material may be from existing slash piles generally tops, limbs, stumps, and root wads generated from timber management activities or highway right-of-way clearing debris. Provide equipment sufficient to forward piled slash. Slash may vary from green to aged and dry with variable lengths and diameters and may include stumps and whole trees. Slash may be entirely from conifers, hardwoods, shrubs, or a mix. Provide trucking, loading, and unloading of product to designated sites, in general within a 10-mile radius of the project site. Disposal of slash and biomass using portable air curtain incinerators or ACI's. *An air curtain burner, also called an air curtain incinerator, carbonator, or mechanized burner operates by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs.*

Socio-Economic Studies (Professional Services Scope and NEPA Scope)

PROFESSIONAL SERVICES SCOPE

Collect data on the social and economic environment including information related to subsistence resources and uses. It may include analysis of social and economic information for NEPA or landscape analysis.

Describe the social and economic conditions or contributions of the project area in relation to the local and regional settings. The socio-economic analysis must include various resource values including recreation, scenery, habitat, and other related items.

Financial and Economic Analysis shall be completed as guided by FSH 2409.18. This work will be completed for the project area in relation to local and regional values. The purpose of this analysis will be to determine the most cost-efficient and practicable method/approach to achieve the objectives outlined by Forest plans and to produce a program/project where the long-term benefits exceed costs (FSM 2430.3).

NEPA

Socio-Economic analysis work may include data collection on the social and economic environment, including information related to subsistence resources and uses. It may include analysis of social and economic information for a project scale environmental analysis, landscape analysis, or for a Forest Plan. Where local Forest Plans include economic analyses, project scale analyses may build from these broader assessments in a manner where their conclusions can be tied back to those made in the Forest Plan.

The contractor may be tasked with describing the social and economic conditions or contributions of the project area or plan area in relation to the local and regional settings. The socio-economic analysis may include various resource values including recreation, scenery, habitat, etc. As requested by the Forest Service, the contractor may be tasked with coordinating with local states and counties in order to assess implications to non-federal economic development plans.

Socio-economic analysis may include the use of economic sector input-output models (such as IMPLAN) to estimate changes in jobs and income. Other analyses may be needed to evaluate trends associated with monitoring socio-economic indicators at local or regional scales.

Some tasks may be related to Environmental Justice Support- See Environmental Justice Analysis scope.

Soil Science Services (NEPA Scope)

Soil Scientists may perform the necessary components of soils resource inventory, analysis or monitoring. The contractor may be tasked with gathering field data to analyze effects of proposed management activities on soils.

The contractor must be knowledgeable of principles, concepts, and practices of soil science applicable to soil management, classification, and mapping. Inventory, analysis or monitoring must be performed by a Soil Scientist in compliance with policy contained in the Forest Service Manual and any other pertinent information provided by the Forest Service in the order.

The contractor may be tasked with collecting sufficient field information to assess the existing conditions of the soil's resources for the project area. Work may include evaluating and documenting susceptibility to erosion, soil compaction, soil stability channel, threat of onsite and downstream impacts, and capabilities and limitations of soils for a variety of contemplated uses and activities (e.g., timber sales, watershed rehabilitation projects, transportation planning, or recreation development) using local Forest evaluation and analysis protocols. Work may include addressing cumulative effects and mitigation measures.

Stocking Surveys (Professional Services Scope and Natural Resource Restoration Scope)

Stocking surveys to determine stocking level will be utilized to determine the degree to which trees occupy the land, measured by basal area or trees per acre, compared with stocking standards for full utilization of the land's growth potential. Stocking surveys or examinations may be conducted after the first and third growing seasons following reforestation treatment. Surveys may continue until each stand demonstrates that adequate stocking is achieved, and the stand can be certified as satisfactorily stocked. The intent of the survey is to determine density, species composition and distribution of seedlings. Stocking standards will vary by agency and will be described in the call order specifications.

Data collection may include surveys such as stake tree survival exams, stocking surveys and stand density exams, periodic exams conducted from time of planting to stand maturity.

Stream / Riparian / Wetland Restoration / Channel Realignment (Natural Resource Restoration Scope)

Provide all services necessary to perform riparian and wetland restoration and enhancement. Design, plan, mitigate, and implement complex riparian/wetland restoration projects including but not limited to: wetland delineation; wetland relocation/creation; stream classification; federal and state regulations, licenses, and permitting requirements; heavy equipment sufficient to relocate/enhance stream channels/wetlands; place in-stream structures; plant large size container trees and shrubs; transport large volumes of rock, sand, sediment, woody debris, etc. Electrofishing or electroshocking may be requested if diversion or disruption of fish bearing streams is expected. Treat and control or remove invasive species. Additional services may involve plant salvage, direct transplanting, maintaining plant materials on site or transporting and storage and/or increase off site for future use and whole tree removal (tree-tipping), transport and placement. As-built plans or land mapping of constructed or enhanced wetlands may be requested following implementation.

Subleader To Project Manager

Tasks will be the same as those described under the Project Manager scope, but the role will be as an assistant to a primary project manager or in a supporting role to the primary project or program manager. Tasks will likely be delegated by project manager or a designated point of contact as it

Technology Specialist

One primary purpose of a technology specialist will be to assist in supporting existing and increasing Regional or other level IT support requirements for computers/servers, software and data communications activities. The contractor may need to provide accurate and complete records pertaining to the setup, maintenance and repairs of each computer/server, network device or other IT related hardware, software and communication problems/issues. Contractor may need to provide professional services for the enhancement and maintenance of various agency systems. This includes development of interfaces and support for existing Systems to implement COTS software products, providing a solution to improve time and accuracy of integrating or interfacing with software packages.

Other requested services may consist of an evaluation of in the area of Assistive Technology, a written report completed within 30 calendar days of evaluation, participation in a multi-disciplinary team meeting regarding the evaluation results, development of appropriate goals and objectives, training where necessary in the use of the selected technology.

Technical support may be requested in regard to equipment or facility maintenance for a variety of field equipment, monitoring equipment, and other devices to measure environmental effects. Individual call orders will provide more detailed specifications.

The Contractor/Cooperator and other external organizations (hereafter called Contractor) providing Information Technology (IT) services to the Forest Service agrees to comply with the applicable IT security policy as outlined in this document. The Contractor and other external organizations will be responsible for IT security for all systems connected to the Forest Service network or operated by the Contractor and other external organizations for the Forest Service, regardless of location. This is applicable to all or any part of the contract that includes IT resources or services in which the Contractor and other external organizations must have physical or electronic access to Forest Service sensitive information that directly support the mission of the Forest Service. The term “information technology”, as used in this clause, means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. This includes both major applications and general support systems as defined by OMB Circular A-130.

Travel Management (Professional Services Scope and NEPA Scope)

TRAVEL AND ACCESS MANAGEMENT

Conduct analysis for travel and access management. Government regulations (36 CFR212) pertaining to travel management and travel planning and policy and procedures contained in agency applicable materials, such as the Forest Service Manual 7712 and Forest Service Handbook 7709.55 Chapter 20, will be the basis of the required work.

Involve a broad spectrum of interested and affected citizens; local, state, and federal agencies; and tribal governments. Public involvement is an integral part of the travel analysis process.

Conduct the Travel Analysis Process and Travel Analysis Report.

Complete a travel analysis that identifies the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of Federal System lands. Work may include field surveys or investigations, data gathering, statistical analysis, and documentation.

TRAVEL MANAGEMENT (NEPA)

Work may include completing a travel analysis, including a travel analysis report, in accordance with the Forest Service Manual and the Forest Service Handbook, which identifies the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands. Work may include field surveys or investigations, data gathering, statistical analysis, and documentation.

The travel analysis report must be prepared by a team of resource specialists from a variety of disciplines such as engineers, botanists, soils scientists, geologists, hydrologists, foresters, biologists, social scientists, recreation planners, landscape architects and economists on an interdisciplinary team.

The contractor must be knowledgeable of Forest Service regulations and directives pertaining to travel management and travel planning. Policy and procedures contained in the Forest Service Manual and the Forest Service Handbook will be the basis of the required work.

Tree Climbing and Cone/Seed Collection (Natural Resource Restoration Scope)

Provide all necessary equipment and personnel sufficient to access and collect cones and seeds from a variety of conifer and hardwood tree species. Collection sites, conditions, and methods may be highly variable. Collection sites may be remote requiring significant driving and/or hiking. Work may also include climbing and caging cones prior to collection, installing wildlife habitat structures, or tree topping via mechanical or explosive means.

Tree Cooler Maintenance and Servicing (Natural Resource Restoration Scope)

Provide qualified service representatives to perform routine and emergency refrigerated tree cooler maintenance services and repairs as recommended by the manufacturer. Tree cooler servicing will follow manufacturer's recommendations for operation, startup, and shutdown.

Tree Planting (Natural Resource Restoration Scope)

The Contractor shall furnish all expertise, supervision, labor, tools, equipment, supplies (except those designated as Government furnished), transportation, lodging, and incidentals to perform all work necessary for reforestation services on a national forest. The sub-items in this category include, tubing, netting, gopher baiting/trapping, vegetation barrier mat placement, grubbing, big game repellant and riparian/upland planting.

Tribal Liaison (Communications/Tribal Liaison Scope)

1. Facilitates formal consultation between the Agency and regional tribes and serves as the technical advisor to the Forest on tribal relations and tribal consultation.
2. Facilitates, leads, and advises on tribal consultation and coordination for complex projects, land actions, and plans involving laws.
3. Coordinates with consultants, staff, and managers to prepare ethnographic studies, trails studies, and associated cultural studies.
4. Develops and provides training and guidance about Native American cultures, general structure of tribal governments; and Native American consultation requirements.

5. Develops and provides training and guidance about Native American cultures, general structure of tribal governments; and Native American consultation requirements.
6. Evaluates sensitive issues and recommends steps to solve issues.
7. Responsible for developing contacts within concerned tribes that facilitate government-to-government relations between agency decision-makers and members of tribal government.
8. Assists hiring managers with the identification of recruitment opportunities; serves as a point of contact and liaison with Native organizations to provide information and assist with employment, volunteer, and work study options.

Vegetation Management (Natural Resource Restoration & NEPA Scopes, Amendment 4)

Perform vegetation monitoring for a variety of ecological settings and data requirements, including for example: rangeland, forested and riparian/wetland habitats, as well as restoration/revegetation work including road construction, fire, wetland enhancement, wildlife/fisheries habitat improvement, and ecological studies.

Locate and/or establish and monument temporary and/or permanent monitoring plots within designated areas. Analyze existing and/or collected data and provide reports.

Perform plant/vegetation surveys and mapping including but not limited to:

- vascular/non-vascular plant surveys
- timber stand exams
- vegetation typing and mapping, etc.

Monitoring protocols and methodologies will be expounded upon within each individual Call.

FUELS REDUCTION AND VEGETATION MANAGEMENT (UPDATED IN AMENDMENT 4)

The work is general in nature and associated with, but not limited to, plantation thinning, pullback, pre-commercial thinning to a variable density, hand piling, grapple piling, burning of slash piles, mechanical thinning with mastication/slash busting, timber stand improvement, site preparation and other activities including chemical treatments that coincide with this type of work. Deviations and additional specifications will be identified in individual Call Orders. All future Call Orders placed under a resultant contract will include Detailed Unit Information Sheets (DUIS) and any other documentation necessary to understand the desired outcome. The DUIS can be more restrictive than the terms of this BPA and, when this is the case, the DUIS will take precedence.

The Contractor shall furnish all labor, supervision, equipment, materials, transportation, supplies (unless specified elsewhere as Government-furnished), and incidentals needed to complete specified work. The Contractor shall develop a plan of operation to accomplish the objectives, including a written quality control plan and a safety plan that are in compliance with the terms and specifications of the contract.

The use of goats and/or prescription grazing by other animals or insects to help control vegetation may also be used. Monitor and inventory existing populations and areas susceptible to invasion.

NEPA

Vegetation Management work may include conducting vegetation inventories, formal stand examinations conducted through Common Stand Exam protocols, or more general walk-through examinations. Using stand and other resource information, work may include developing diagnostic and/or implementation

prescriptions for timber sale or stewardship projects. Work may include all aspects of the NEPA process and related document preparation for Forest Service-planned timber projects or vegetation projects, including road location. Work may include collecting sufficient field information to prepare initial prescriptions, determine feasible treatment options, and assess effects of these treatments on the resource, according to the desired conditions contained within the particular Forest Plan.

Work may include analyzing the current condition of insect, disease and fuels buildup for the project area including basic predictions resulting from current conditions. Work may include collecting sufficient field information for the Contractor to prepare diagnostic prescriptions, determine feasible treatment options, and to assess effects on listed or proposed plant species.

The contractor may be tasked with preparing a fuels management plan for each stand proposed for harvest or vegetative treatment unit. Data collection for the plan must be in compliance with policy contained in the Forest Service Manual and any other pertinent information provided by the Forest Service in the order, such as County Wildfire Mitigation Plans.

If tasked, a Botanist must prepare a botanical report for at-risk species (threatened, endangered, proposed, candidate, sensitive, species of conservation concern, or species identified by the Forest) and invasive plant species. Plant surveys must be performed in compliance with policy contained in Forest Service direction, including the Forest Service Manual.

If tasked, a Botanist must prepare a draft Biological Assessment/Evaluation for any threatened, endangered, proposed, candidate or sensitive plant species that are known or suspected to occur within the project area, or for which potential habitat has been identified. Data collected in support of these evaluations must be in a format that allows assessments to be completed that contribute to determinations of effects under the ESA, consistency with Forest Plan direction and general NEPA effects disclosure.

The Forest Service will provide a list of plants to be assessed. The Forest Service retains approval authority and the ability to revise determinations for any Biological Assessment / Biological Evaluation written.

The contractor must be knowledgeable in the principles, practices, and concepts of botany sufficient to perform the identification, surveying and/or sampling techniques and management of plants, including terrestrial and aquatic invasive plant species. The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct vegetation inventories and plant work; of vegetation communities as described in botanical literature to identify plant communities during field inventories; and professional knowledge of plant taxonomy in order to identify plants during field inventories and to confirm identification utilizing other resources. The contractor must be knowledgeable of federal, state, and county terrestrial and aquatic invasive species regulations. The contractor must be knowledgeable of the ESA. Special permits/certifications to perform this work may be required of the contractor.

Work may include analyzing the current condition of invasive plants for the project area including risk assessments for introduction and spread of species. Work may include collecting sufficient field information to prepare appropriate mitigation measures, determining feasible treatment options, and assessing effects of the proposed action. Work may include data collection, which must be in compliance with policy contained in the Forest Service Manual and any other pertinent information provided by the Forest Service in the order.

If tasked, a Forester must prepare a silvicultural prescription for each area proposed for harvest or treatment (e.g., fuel treatment, reforestation, timber stand improvement, or mechanical habitat improvement). Prescriptions must be prepared in compliance with policy contained in the Forest Service Manual and using

guidelines contained in the Forest Service Handbook (Silvicultural Practices Handbook) and any other pertinent information provided by the Forest Service in the order.

Wildlife Biology Services (Wildlife Surveys Scope, NEPA Scope and Professional Services Scope)

The purpose of this contract is to provide a pool of contractors available to accomplish wildlife surveys to determine the presence or absence of target species, document and map locations and populations of target species, and provide an ecological description of the areas surveyed. Work can be on lands managed by federal agencies anywhere under the jurisdiction of the US Federal Government.

Botanical surveys may include aquatic, avian, or terrestrial species for an assortment of projects in diverse ecological settings over a broad geographic area.

The products of this BPA will be described on each individual Call Order and may include:

1. Conduct wildlife surveys according to protocol(s) for target aquatic, avian, and terrestrial species.
2. Document and map target species occurrence when located by surveys, using GPS and field forms. Fill out appropriate forms legibly so they are able to be printed or copied.
3. Document and map areas surveyed whether or not target species were found on appropriate forms filled out legibly and able to be printed or copied.
4. Provide habitat information for target species populations and areas surveyed.
5. Provide maps delineating survey routes and populations of target wildlife species, or GPS Tracks of survey routes with locations of target wildlife species.
6. Written report summarizing areas surveyed and target species located/mapped. If surveys span more than one season, then annual reports will be provided. If one-season surveys, then a final report will be provided. Reports include associated species, habitat descriptions, and habitat threats/disturbances.
7. Provide GIS mapping files and include a complete list of target species per unit and their location coordinates in an excel spreadsheet. Each BPA call will specify which mapping coordinates are to be used (e.g., UTM in Datum NAD 1983, Zones 10 North or 11 North, or latitude and longitude in decimal degrees).

The contractor shall furnish everything necessary to perform this contract including, but not limited to, all labor, equipment, supervision, materials/supplies (except those materials designated as Government furnished and incidentals necessary to perform aquatic, avian, and terrestrial wildlife species surveys in accordance with the enclosed specifications, terms and conditions. All federal and state rules and regulations will be followed as well as appropriate federal agency jurisdictional guidelines unique to each agency.

Follow Federal and state rules and regulations which include but are not limited to:

- Transportation
- Equipment Operation
- Licensing
- Permitting
- Safety
- Labor Laws
- Federal Travel Regulations

The Contractor shall provide field personnel who have experience and knowledge of the following:

1) Are proficient in the identification of target species which pertain to the type of survey being conducted.
2) Experience in field techniques including aerial photo, map interpretation, and field identification skills (both sight and sound).
3) Ability to document location, ecological condition, habitat, and survey routes for areas occupied by target species.

Specifically, but not necessarily all inclusive, the Contractor shall furnish:

1) Compass with azimuth and the appropriate declination setting for the geographic area.
2) Clinometer
3) Hand Lens (minimum magnification 10X).
4) GPS receiver unit (recreational grade at a minimum) that will be used to map each site for each target species. The GPS unit must be capable of allowing the user to select the correct coordinate system (UTM and datum or lat/long) as specified in the BPA call. Mapping accuracy shall be determined at the call order (ex: 30 meters or better).
5) Appropriate technical references (i.e., photographs, call recordings) to accurately identify aquatic, avian, and terrestrial species encountered during the inventory
6) Contractors must have access to a computer with an internet connection, email, and Microsoft Word and Excel programs and GIS mapping software if specified in BPA call.

The Contractor will be required to rework any area or portion thereof that does not meet the terms of the contract. If the inspection reveals the need for rework, the COR will notify the Contractor immediately in writing. All reworks must be completed prior to proceeding with new areas, unless otherwise specified in the BPA call.

FOR EXAMPLE:

The following deficiencies will require rework:

- Populations or habitats not identified;
- Survey and/or Sighting forms not filled out completely and correctly;
- Maps that do not thoroughly or accurately portray the survey route, have target species incorrectly located, are not legible, and do not have a linking identifier to any sighting forms, and voucher specimens;
- Sites that cannot be relocated by flagging or do not have a linking identifier to any sighting forms, voucher specimens and maps
- GIS data that is the wrong datum, not digitized correctly, unique identifier does not match data form or is missing a required attribute and;
- Final reports that are not complete.

Unless otherwise specified in the BPA call, if work falls below minimum standards for field work (e.g., inaccurate GPS coordinates, monumenting) and documentation (e.g., maps, sighting forms, vouchers, and report), the Government will immediately notify the Contractor in writing and order improvement of the quality of future work. Reinspection after rework will be made in the same manner as the first inspection but in a different area. If the quality of future work is not raised to a satisfactory level within three consecutive workdays after receipt of notice in writing of unsatisfactory work, the Contractor's right to proceed may be

terminated and the contract considered in default. Repeated failure to perform work at an acceptable performance shall also be considered reason for contract termination and default action.

TERRESTRIAL AND AQUATIC INVASIVE SPECIES

A qualified Fisheries and/or Wildlife Biologist must be used to prepare a biological report for invasive fish and/or wildlife species. A qualified Botanist must be used to prepare a botanical report for invasive plant species. Plant surveys must be performed in compliance with policy contained in Forest Service direction including the Forest Service Manual. Data collection must be in compliance with policies contained in the Forest Service Manual and any other pertinent information provided by the Forest Service in the order.

The contractor must be knowledgeable in the principles, practices, and concepts of botany sufficient to perform the identification, surveying and/or sampling techniques and management of terrestrial and aquatic invasive species. The contractor must be knowledgeable in the principles, practices, and concepts of fisheries and wildlife science sufficient to perform the identification, surveying and/or sampling techniques and management of terrestrial and aquatic invasive faunal species.

The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct vegetation inventories and plant work; of vegetation communities as described in botanical literature to identify plant communities during field inventories; and professional knowledge of plant taxonomy in order to identify plants during field inventories and to confirm identification utilizing other resources. The contractor must be knowledgeable of the basic methods, techniques, and procedures necessary to conduct fisheries and wildlife inventories and related work; of animal communities as described in fisheries and wildlife literature to identify animal communities during field inventories; and professional knowledge of terrestrial and aquatic animal taxonomy in order to identify animals during field inventories and to confirm identification utilizing other resources.

The contractor may be tasked with collecting sufficient field information to assess the existing condition of habitats for invasive fauna species.

The contractor must be knowledgeable of federal, state, county, and local terrestrial and aquatic invasive species regulations and of the ESA. Special permits/certifications to perform this work may be required of the contractor.

Work may include analyzing the current condition of invasive plants for the project area including risk assessments for introduction and spread of species; collecting sufficient field information to prepare appropriate mitigation measures, determining feasible treatment options, and assessing effects of the proposed action; and addressing cumulative effects and mitigation measures.

FISHERIES AND WILDLIFE (NEPA)

In conjunction with soil and water resources, collect sufficient field information to assess the existing conditions of the aquatic biota and aquatic biota habitat resources for the project area. Data collected in support of these evaluations must be in a format that allows assessments to be completed that contribute to determinations of effects under the Endangered Species Act, consistency with Forest Plan direction, and general NEPA effects disclosure.

Collect sufficient field information to assess the existing condition of habitats for aquatic and terrestrial wildlife species of concern, including ESA-listed, proposed and candidate species and sensitive species.

Complete a Biological Assessment/ Evaluation (BA/BE), consistent with Forest Service Manual 2670 (for example), for any threatened, endangered, proposed, candidate or sensitive fish or wildlife species that are

known or suspected to occur within the project area or for which habitat has been identified. The Forest Service will provide a list of fish and wildlife species to be assessed. The USFS retains approval authority and the ability to reverse determinations for any BA/BE written.

Data collection may include surveys for any wildlife species such as mollusks, red tree voles and northern spotted owl. Surveys shall be conducted according to protocol for target species.