

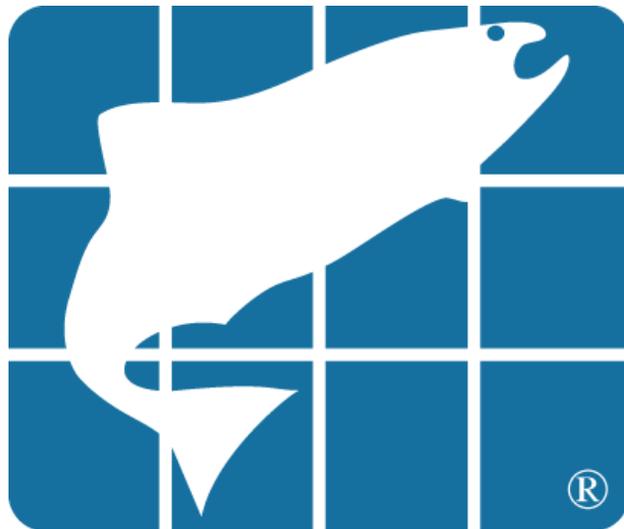
# Cramer Fish Sciences

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**Mill Creek A to Z Stewardship on the Colville National Forest**

## *Work Plan-NEPA Analysis*

December 2, 2013



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## Introduction

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Cramer Fish Sciences (CFS) has prepared this work plan as a comprehensive plan and schedule for completion of all aspects of NEPA Analysis for the Mill Creek A to Z Stewardship Project. It accounts for all the tasks within Appendix A of the Solicitation, the deliverables listed therein, preparation time, and review time by the Forest Service for our work product. The work plan also includes preliminary identification of specific analyses required for the NEPA analysis, identifies existing data that can support these analyses, and additional data needs.

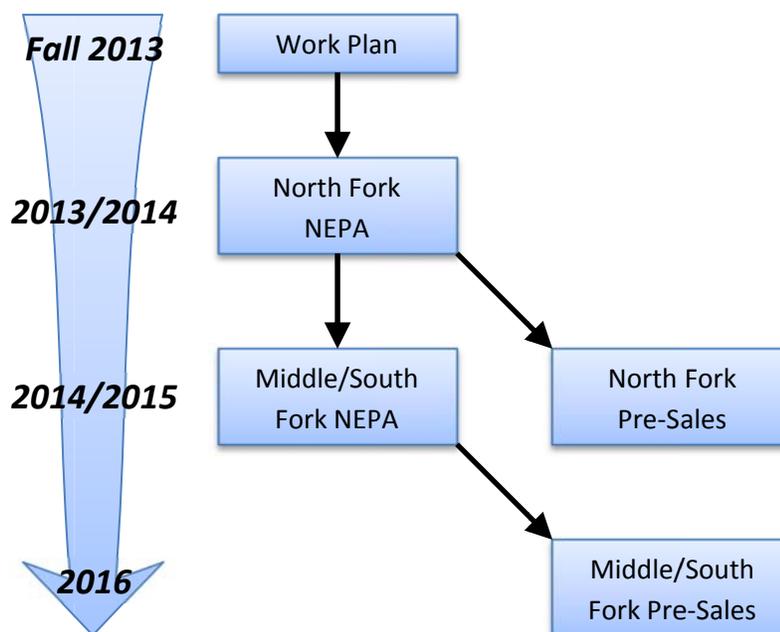
## General Strategy

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We will conduct NEPA analyses addressing commercial harvest and stewardship activities for two separate planning areas (Figure 1). Each of the planning areas encompasses distinct watersheds which are for the most part accessed by different mainline roads. The North Fork Planning Area primarily encompasses Colville National Forest (CNF) lands in the North Fork Mill Creek drainage. Most of these lands are accessed from the Aladdin Highway; a small portion is in the Onion Creek drainage and another small portion is accessed from the Middle/South Fork Planning Area. The Middle/South Fork Planning Area includes CNF lands in the Middle and South Fork Mill Creek drainage which are primarily accessed from the C-4668 loop. Since resource characteristics, anticipated issues, and road access for each planning area are distinct, project activities for the planning areas will be mostly disconnected from one another.

We propose conducting NEPA analyses in sequential fashion (see Figure 2), starting with the North Fork Planning Area in 2013/2014, and commencing in fall 2013. Our intent is to complete the NEPA analysis in 2014 in time for pre-sale activities to start and restoration activities to begin in the North Fork Planning Area in 2015. Upon completion of the NEPA analysis for the North Fork Planning Area, we would then start NEPA analysis for the Middle/South Fork Planning Area in winter 2014/2015. Our intent is to complete the NEPA analysis in 2015 in time for pre-sale activities to start and restoration activities to begin in the Middle/South Fork Planning Area in 2016. To expedite the planning process in the Middle/South Fork Planning Area, data gathering and data collection conducted during the planning process for the North Fork Planning Area would also include the Middle/South Fork Planning Area.





**Figure 2:** Timeline for development of planning area NEPA analyses and initiation of pre-sales activities by a separate subcontractor.

## Task Descriptions

CFS will manage this project on a Task Order basis. Task Orders will provide detailed direction to CFS staff and to subcontractors about activities, deliverables, and schedules for each task. For each planning area, four task orders will be issued, covering four distinct phases:

1. Information gathering/analysis and preparation of the Proposed Action
2. Stakeholder collaboration, issue identification, and alternatives development
3. Field investigation, effects analysis, and preparation of specialist reports
4. Draft EA/BE/BA development, public comment, and final documents

Briefly, Phase 1 entails gathering available information and using it to conduct a desktop analysis to identify opportunities and constraints for meeting project objectives in the planning area. Phase 2 uses the findings in Phase 1 as a basis for soliciting public input through the NEPA process. Collaboration with stakeholders occurs during this phase and may lead to refinements to the proposed action and alternatives in order to address issues identified during the public input process. Phase 3 responds to issues identified during Phase 2 by conducting necessary field surveys and analyses to evaluate the effects of the proposed action and alternatives. Phase 4 compiles findings of the previous phases into a draft Environmental Assessment (EA),

solicits public comment on the draft EA, and responds to comments via a final EA; other associated NEPA documents are prepared in this task, too. Phases 1 through 3 occur in sequential fashion, with each phase dependent on the outcome of the previous phase. Phase 4 will occur in parallel fashion, developing EA sections as other phases are ongoing. Detailed descriptions of each phase follow below.

## **Phase 1 – Information gathering/analysis and preparation of the Proposed Action**

### Overview

The primary objective of this phase is for the IDT to identify commercial harvest and stewardship activities within the planning area. This task will start with the IDT consulting with the Forest Service to review the planning area, purpose and need for the project, and potential issues that may influence planning. We will accomplish this via teleconferences arranged between Forest Service Resource Specialists and IDT Resource Specialists. As part of this effort, the IDT will gather available data sets from the Forest Service and other entities that can be used to identify opportunities and constraints for meeting project objectives. This process was ongoing during the preparation of the Work Plan.

Identification of a Proposed Action will be guided by a Purpose and Need Statement that will be developed parallel to and in conjunction with identifying opportunities and constraints. It will be based on the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook), and Solicitation Appendix A. Resource-specific purpose and need will also be derived from consultation with Forest Service specialists.

The IDT will identify opportunities and constraints for achieving project objectives via desktop analysis of available resource information. Generally, these desktop analyses reflect approaches outlined by Resource Specialists in Phase 3, conducted to the extent possible with available data. Key analyses include a logging systems and transportation analysis, and a silvicultural prescription analysis to identify potential commercial harvest activities. Available information will also be used to identify opportunities for stewardship activities for improving road and stand conditions. Stewardship activities to improve or restore other resource conditions (e.g., wildlife or fish habitat) will also be identified as available information allows.

### Specifications

Detailed specifications for desktop analyses will generally reflect specifications outlined in Phase 3, but only to the extent possible with available data sources. Analyses will be conducted to a level of detail necessary to support a credible Proposed Action and will be coordinated by the CFS Project Manager and Resource Leads to meet this task objective. Preliminary desktop analyses will be reviewed with Forest Service specialists and other IDT members and will be revised as needed. Findings of these desktop analyses will be documented by technical memos. Data sets will be compiled into a comprehensive GIS database, as will spatially-explicit opportunities and constraints for meeting project objectives.

Once opportunities and constraints for meeting project objectives are identified and documented, the IDT will convene to synthesize these findings by identifying a tractable set of commercial harvest and stewardship activities that meet the purpose and need for the project. We will accomplish this through a one to two-day IDT workshop, led by the Project Manager and NEPA Specialist, where the IDT will identify:

- Commercial harvest opportunities within logical harvest units determined by the LSTA and employing silvicultural prescriptions that achieve project objectives. We will also identify road needs, settings, and landings associated with these opportunities.
- Stewardship opportunities within logical treatment areas, which will vary by resource. For instance, stand restoration would be identified on a stand basis, road reconstruction will be identified on a road segment basis, and so on.
- Resource conflicts with commercial harvest and stewardship opportunities. These constraints will be assessed spatially addressing the intersection, proximity, or connection of a potential activity with an affected resource; for instance, the intersection of ground-disturbing activities with a cultural resource.
- Measures to avoid, minimize, or mitigate potential effects of project activities on various resources in order to lessen or eliminate the potential for significant impacts.

Ultimately, we will identify a set of commercial harvest and stewardship activities that are operationally feasible within the planning area. This will be accomplished via a collaborative process within the IDT and will constitute the Proposed Action. Along with the Purpose and Need Statement, it will serve as the basis for collaboration and public comment in Phase 2. This Proposed Action is expected to have the following details:

- Location and design of road construction, reconstruction, and decommissioning
- Location and design of commercial harvest units, settings, and landings
- Location and design of pre-commercial stand treatments
- Location and design of project area fuel reduction projects
- Prescriptions for all stand and fuels management activities

- Location and design layout of fish habitat improvement projects

Harvest and treatment units will be numbered following Colville National Forest standards and tracked through the duration of the project.

### Deliverables

The following deliverables will be developed during Phase 1 and placed in the Project Record:

- Meeting notes of Forest Service resource specialist interviews
- Available data sets from the Forest Service and other entities
- Meeting notes regarding preliminary desktop analyses
- Technical memos documenting final desktop analyses
- Spatial data sets identifying opportunities and constraints
- Meeting notes of the IDT workshop to identify project activities
- Spatial data sets identifying Proposed Action treatment activities
- Purpose and Need Statement and Proposed Action

Approval from the Responsible Official (Forest Supervisor) or their Delegated Official (District Ranger) will be needed for the Proposed Action and Purpose and Need Statement.

Compilation of deliverables into the Project Record will be coordinated by the Writer/Editor. Overall, it is understood that all field data, project documents and reports and references shall be submitted to the Forest Service upon request. We will provide any data, reference material or other project documents (e.g., case studies, research results, other NEPA documents) used as part of, or to support, project analysis to the Forest Service upon request. Field data, project documents and reports and references shall not be released to outside organizations or agencies without written consent from the Forest Service.

## **Phase 2 – Stakeholder collaboration, issue identification, and alternatives development**

### Overview

The objective of this phase is to share Phase 1 findings with interested parties as a way to solicit their input on commercial harvest and stewardship activities. It will include a press release for local news outlets, a public website, a request letter distributed to stakeholders, classified ads, and meetings with elected officials and other stakeholders in Colville, WA. A mailing list will be provided by the Forest Service. Information distributed will be based on the Purpose and Needs Statement and Proposed Action developed in Phase 1. In addition to public meetings, we will meet with interested groups, including but not limited to: the Northeast Washington

Forest Coalition (NEWFC), the Public Lands Advisory Committee (PLAC), elected officials, governmental agencies, non-governmental organizations, grazing permittees, and neighboring landowners. We will also initiate consultation with the U.S. Fish and Wildlife Service and the Washington State Historical Society Preservation Office and will prepare information for the Forest Service to initiate government-to-government consultation with area tribes (Confederated Tribes of the Colville Reservation, Spokane Tribe, and Kalispel Tribe).

Public meetings will be conducted by the CFS Project Manager and NEPA Specialist and will be recorded by the CFS Writer/Editor. These meetings will focus on the following topics:

- Tiering of the project proposal to the Colville Forest Plan
- Purpose and Need Statement for the planning area
- Opportunities and constraints for meeting project objectives
- Integration of desktop analyses to identify a Proposed Action
- Soliciting interests and concerns from the public stakeholders

Meeting materials will be reviewed and approved by the Forest Service. One or more methods for soliciting feedback will be employed, including but not limited to: oral comment, written comment, map-based comment, and listening/recording stations. We will work with the Forest Service to identify and implement methods that have worked effectively in the past.

All public input will be logged into a public comments database to facilitate review and synthesis. This database will also be used for updating the Forest Service mailing list for the project. The CFS Project Manager and NEPA Specialist will analyze and synthesize input gathered, along with information gathered in the previous phase, to identify issues and a range of reasonable alternatives responding to issues to be carried forward in the NEPA analysis. In doing so, if we find substantially different ideas are provided during the collaboration process than expressed in our Proposed Action, we may develop a new action alternative around those ideas. This process may necessitate an IDT workshop similar to that conducted in Phase 1, led by the Project Manager and NEPA Specialist, to develop viable alternatives. In this case, a similar process will be followed as that used to develop the Proposed Action. At a minimum, Resource Area Leads and Specialists will be asked to review topic-area comments to aid in this synthesis. This phase will culminate in a Key Issues and Alternatives Statement which will be drafted for review and approval by the Responsible Official or their Delegated Official.

### Specifications

The following contract specifications will govern stakeholder collaboration, issue identification, and alternatives development by the IDT in this phase:

- The CEQ regulations provide the following direction on public notice and participation:

Agencies shall: . . .

(b) Provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected.

(1) In all cases the agency shall mail notice to those who have requested it on an individual action.

(2) In the case of an action with effects of national concern notice shall include publication in the FEDERAL REGISTER and notice by mail to national organizations reasonably expected to be interested in the matter . . . An agency engaged in rulemaking may provide notice by mail to national organizations who have requested that notice regularly be provided. Agencies shall maintain a list of such organizations.

(3) In the case of an action with effects primarily of local concern the notice may include:

(i) Notice to State and area wide clearinghouses . . .

(ii) Notice to Indian tribes when effects may occur on reservations.

(iii) Following the affected State's public notice procedures for comparable actions.

(iv) Publication in local newspapers (in papers of general circulation rather than legal papers).

(v) Notice through other local media.

(vi) Notice to potentially interested community organizations including small business associations.

(vii) Publication in newsletters that may be expected to reach potentially interested persons.

(viii) Direct mailing to owners and occupants of nearby or affected property.

(ix) Posting of notice on and off site in the area where the action is to be located.

(c) Hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency. Criteria shall include whether there is:

(1) Substantial environmental controversy concerning the proposed action or substantial interest in holding the hearing.

(2) A request for a hearing by another agency with jurisdiction over the action supported by reasons why a hearing will be helpful. If a draft environmental impact statement is to be considered at a public hearing, the agency should make the statement available to the public at least 15 days in advance (unless

the purpose of the hearing is to provide information for the draft environmental impact statement).

(d) Solicit appropriate information from the public. (40 CFR 1506.6)

- When soliciting comments from the public, the following paragraph should be included: Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the Agency with the ability to provide the respondent with subsequent environmental documents.
- When extensive public involvement is necessary, prepare a formal public participation strategy (FSM 1626). Partnership and collaboration resources, including memorandum of understanding templates, can be found in the Partnership Resource Center.
- CFS is responsible for preparing any information for release to the news media; however, CFS shall release no information directly or indirectly without prior written approval from the Forest Service. CFS is not authorized to disseminate information to the public, verbally or in writing without prior written approval from the Forest Service.
- CFS shall be prepared to develop presentation components for public meetings, workshops, newsletters, small group presentations, field trips, news releases, mailings, paid newspaper advertisements, radio announcements, Federal Register notices, brochures/booklets/pamphlets, public meeting transcripts, and informal contacts. Any such documents produced by CFS shall be provided to the Forest Service for review prior to their release or use. CFS shall provide the Forest Service with copies of all final public involvement documents upon their release or execution.
- CFS shall provide the Forest Service with a list of members of the public who contact CFS and desire to receive a copy of the draft or final EAs.

### Deliverables

The following deliverables will be developed during Phase 2 and placed in the Project Record:

- Stakeholder collaboration media, including:
  - News releases
  - Public website
  - Request letter
  - Classified ads
  - Meeting materials
- Meeting notes from stakeholder consultation with:
  - NEWFC
  - PLAC
  - Elected officials

- Governmental agencies
- Non-governmental organizations
- Grazing permittees
- Neighboring landowners
- Public input organized into a public comments database
- Meeting notes from IDT meetings regarding issues and alternatives
- Updated mailing list for distributing draft or final EAs
- Spatial data sets identifying action alternative activities
- Key Issues and Alternatives Statement

Approval from the Responsible Official (Forest Supervisor) or their Delegated Official (District Ranger) will be needed for the Key Issues and Alternatives Statement. We have received direction from the Delegated Official that a Public Participation Plan is not required.

Compilation of deliverables into the Project Record will be coordinated by the Writer/Editor. Overall, it is understood that all field data, project documents and reports and references shall be submitted to the Forest Service upon request. We will provide any data, reference material or other project documents (e.g., case studies, research results, other NEPA documents) used as part of, or to support, project analysis to the Forest Service upon request. Field data, project documents and reports and references shall not be released to outside organizations or agencies without written consent from the Forest Service.

### **Phase 3 – Field investigation, effects analysis, and preparation of specialist reports**

#### Overview

The objective of this phase will be to prepare Specialist Reports containing information required for disclosure of the environmental effects of the Proposed Action and alternatives. Analyses will be responsive to the significant issues identified in Phase 2 and will use Significant Issue Indicators to report effects in terms that the Responsible Official or their Designated Official can use in decision making. Anticipated analyses are outlined below, by resource, based on contract specifications in Solicitation Appendix A and the findings of our resource specialist interviews in Phase 1 for preparation of this work plan. Specialists Reports will provide detail regarding data, analytical methods, and results. They will include content that can be directly incorporated into the Draft EA, including selected Appendices (e.g., BMPs, Monitoring, etc.). Detailed specifications for the content of Specialist Reports are provided below.

Analyses will be based on information gathered during Phase 1 and additional data gathering to fill data gaps. Significant data gaps will be identified in Phase 1. Identification of significant issues in Phase 2 may indicate additional data needs; hence, this work plan represents our best understanding at this time. Location of the Proposed Action and action alternatives will provide spatial and temporal focus for information needs. Once the Proposed Action and Key Issues and Alternative Statement are approved, we will seek the most efficient means to gather data reliably. Anticipated data collection requirements are specified below, by resource, based on contract specifications in Solicitation Appendix A and the findings of our resource specialist interviews in Phase 1. Protocols for field data collection will be developed in all instances along with protocols for data analyses using these data. These protocols will constitute leading sections of resource Specialist reports and will be submitted to the Forest Service for review and acceptance prior to field data collection.

Field data collection and analyses conducted in Phase 3 also provide an opportunity to verify the Proposed Action and action alternatives, validating assumptions underlying location and design of proposed activities. Spatial data sets developed in Phases 1 and 2 identifying Proposed Action and action alternative activities will serve as the basis from which Resource Specialists will conduct their effects analyses. But, in the course of field data collection and analyses, we may find it necessary to adjust location and/or design of the Proposed Action and action alternatives based in order to avoid, minimize, and mitigate detrimental resource effects that were not known or apparent to us during Phase 1 or Phase 2. This will lead to revisions of the Proposed Action and action alternatives, and associated data sets, to be used by all Resource Specialists in their analyses. The need for such revisions will be closely monitored by the Project Manager and NEPA Specialist. Any changes to the Proposed Action or action alternatives will need to be approved by the Responsible Official or their Delegated Official.

Phase 3 represents the majority effort of most Resource Specialists on this project. Generally, field data collection and effects analyses will be directed by the CFS Project Manager and NEPA Specialist to ensure that they meet the needs of the NEPA analysis. Field data collection protocols and analytical methods will be reviewed by the Forest Service. Field data collection and analyses will be coordinated by Resource Area Leads and will be conducted by Resource Specialists and technical staff, as appropriate. All field data collection and effects analyses will be integrated into a comprehensive GIS database managed by the CFS GIS/DB Manager for all team members to access. The CFS Writer/Editor will provide oversight of all document preparation, ensuring seamless integration.

Specifications outlined below indicate several areas of overlap among Resource Specialists in the information they need to conduct resource-specific analyses. The IDT will work

collaboratively to fulfill these information needs in coordinated fashion, not independently. Many IDT Resource Specialists will require vegetation cover type mapping with associated attributes relevant to their individual analyses. This effort will be coordinated to assure consistency in vegetation cover delineations and for efficient interpretation of needed attributes. Most IDT Resource Specialists will require field data collection to support their analyses. There are overlaps in information needs that can be satisfied through coordinated stand exams, roads surveys, and stream surveys. These efforts will also be coordinated, too.

### Specifications

The following general contract specifications will govern field data collection, effects analysis, and specialist report preparation by the IDT in this phase:

- Completing a Specialists Report for the project record that contains information required for disclosure of effects (to identified issues) in the EAs. Specialist will provide a detailed Affected Environment and Environmental Consequences section.
- Resource Specialists are responsible for gathering references to support conclusions made in their Specialist's Report, citing the references as appropriate, providing a bibliography of all references used, and providing a paper or electronic copy of all references, or a website location where the reference may be found, cited for inclusion in the project record.
- Draft Specialist's Reports: Resources tied to potentially significant issues will require separate Specialist's Reports. These reports shall be written to meet requirements identified in 40 CFR §1500-1508, 36 CFR 220, FSM and FSH. Upon request, one copy of each shall be submitted prior to submission of the draft EA and final EA. Concurrence on the analysis methods and conclusions within the draft reports by the Forest Service shall be a prerequisite prior to CFS submitting the draft EA and the final EA for Forest Service review.
- Final Specialist's Reports: CFS shall revise the Specialist's Reports to incorporate comments/issues from the public and the internal scoping/comment process and include a final, signed and dated original in the Project Record, prior to the release of the draft EA for the comment period. If changes are made between the comment period and final EA, a Supplement to the Specialist's Report shall be included with the original report in the project record.

Specifications outlined below are predicated on our best understanding of the issues that need to be analyzed. This understanding is based on the specifications provided in Solicitation Appendix A and the findings of our Forest Service Resource Specialist interviews conducted in Phase 1. But, public collaboration has not taken place which will inevitably provide better local knowledge and insight into resource issues. Furthermore, to the extent available data allow,

some of the Phase 3 analyses will be conducted in Phase 1 to identify opportunities and constraints for achieving project objectives. This will lead to better understanding, too. Therefore, issues to analyze may change and may result in more issues or fewer issues than those included below. Specifications may change. The Forest Service Responsible Official or their Delegated Official will provide final approval of critical issues in Phase 2.

In the sections that follow, we provide a summary of anticipated analyses, available data to support these analyses, and data gaps we anticipate needing to fill for each IDT Resource Specialist. To the extent possible, some of these analyses will be conducted during Phase 1 in developing the Proposed Action. The Resource Specialists will work closely with the most other IDT Resource Specialists to ensure their Specialist report is integrated with the other reports. Collaboration within the IDT will be coordinated by the Project Manager, NEPA Specialist, and Resource Leads. IDT collaboration will be documented and recorded in the Project Record.

### *Silviculturalist*

We have completed initial interviews with the Forest Service Silviculturalist, conducted field reconnaissance of stand conditions, and reviewed the requirements for the Vegetation Specialist in Solicitation Appendix A. Below we outline a series of analyses that would address likely issues we have identified. Potential issues and issue indicators include:

- Stand structure, species composition, and departure from historic conditions
- Forest structural change to enhance resilience to insects, disease and fire
- Acres of high risk stands treated to improve resilience to insect and disease
- Acres of high risk stands treated to reduce the risk of large wildfire
- Acres of overly dense stands treated to improve forest health and productivity
- Volume and potential revenue generation from vegetation treatments

Silvicultural prescriptions will require understanding of the distribution of forest stand structure and locations of high-risk and overly dense stands. Prescription development and vegetative analysis shall follow the guidance provided by the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook, and FSH 2409.17 silvicultural practices handbook including 2409.17-2011-1 August 29, 2011 (Region 6 Supplement). We will also consider silvicultural guidelines developed by NEWFC. We will develop marking guides based on the silvicultural prescription and harvest system and will ensure tree designations (e.g., LTM, DxD, DxPre) meet requirements identified in project's decision document and Colville NF standards (FSM 2430, FSM 2440, and FSH 2409.12). The following data resources are available or are needed:

- In order to assess the entire planning area, cover type maps will be prepared using Forest Service Field Sampled Vegetation (FSVeg) polygons as a starting point. These polygons are unattributed. Therefore, additional interpretation will be needed. This will be accomplished using aerial photography and other remotely sensed data (e.g., LANDFIRE), Forest Service information on past treatment using the Activities geodatabase, and stand exam information from neighboring lands. Cover typing will be field verified. Cover typing will be comprehensive, addressing not only Silvicultural issues, but also needs of other Resource Specialists as noted in the sections that follow.
- Insect and disease mapping is available for the planning area from the Forest Service, developed in cooperation with the Washington Department of Natural Resources.
- Fire regime, risk, and vegetation condition will be produced by the Fire/Fuels Specialist.
- Detailed stand exams will be conducted according to Forest Service protocols in stands listed for commercial harvest and stewardship in the Proposed Action and actin alternatives. Stand exams will be comprehensive, addressing not only Silvicultural issues, but also needs of other Resource Specialists as noted in the sections that follow.

#### *Fire/Fuels Specialist*

We have completed initial interviews with the Forest Service Fire/Fuels Specialist, conducted field reconnaissance, and have reviewed the requirements for the Fire/Fuels Specialist in Solicitation Appendix A. Below we outline a series of analyses that would address likely issues we have identified. Potential issues and issue indicators include:

- Acres of low, moderate, and high risk stands treated to decrease potential risk of crown fire to private lands, homes, powerlines and other infrastructures and to decrease potential risk of crown fire to areas with high conservation value
- Acres moved toward historic fire regime and vegetation condition
- Miles of transportation corridors created or maintained for fuel break
- Amount of defensible space created to protect infrastructure
- Improved forest health and reduced fuel loading with reintroduction of fire

Prescription development will require an understanding of vegetation condition class; fire regimes; low, moderate, and high crown fire risk sites; and fuel models within the project area. Prescription development and analysis shall follow the guidance provided by the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook, and FSH 2409.17 silvicultural practices handbook including 2409.17-2011-1 August 29, 2011 (Region 6

Supplement). It will also include air quality considerations (FSM 5144, FSM 2580). The following data resources are available or are needed for these analyses:

- Fire regime, risk, and vegetation condition maps will be prepared using aerial photography and other remotely sensed data (e.g., LANDFIRE), data sets associated with the Stevens County Community Wildfire Protection Plan (CWPP), Forest Service information on past treatment in the Activities geodatabase, and cover type mapping conducted by the Silviculturalist. Fire regime, risk, and condition will be field verified.
- Detailed stand exams conducted by the Silviculturalist will also collect information useful for assessment by the Fire/Fuels Specialist
- Field verified roads will be compiled by the Transportation Engineer
- Key infrastructure resource values for fire protection will be derived from data sets associated with the Stevens County CWPP and field verified
- Information compiled by other Resource Specialists (Vegetation Specialist, Wildlife Biologist, Fisheries Biologist, Archaeologist, Recreation/Visual Specialist) will be used to locate high value resource conservation areas

#### *Transportation Engineer*

We have completed our initial interview with the Forest Service Transportation Specialist, conducted field reconnaissance of road conditions and logging operability, and have reviewed the requirements for the Transportation Engineering in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Proposed number of miles of road construction, reconstruction and decommissioning necessary to achieve the project objectives
- Existing system and temporary roads to be reconstructed, stored, or decommissioned
- Density of system and non-system roads in each management emphasis area
- Construction, reconstruction, decommission costs for system and non-system roads
- Number of fish passage structures to be constructed or replaced
- Road right-of-way needs from state and private ownerships
- Miles of roads and trails open to the public

The Transportation Engineer and his team will locate, flag, traverse, record GPS coordinates, generate construction notes and create designs for the final locations of all proposed system and non-system roads within the project area. All existing roads to be reconstructed, stored or decommissioned will also be flagged, traversed, have GPS coordinates recorded and construction notes generated for both economics and evaluation by the IDT. Road designs shall follow the guidance provided by the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside

Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook, and FSH 2409.17 silvicultural practices handbook including 2409.17-2011-1 August 29, 2011 (Region 6 Supplement). We will also consider silvicultural guidelines developed by NEWFC. We will compile a dataset for all proposed roads. This layer will be integrated with the existing roads layer to determine which existing roads are candidates for stewardship opportunities. It will also enable us to determine which roads will require new Road Management Objectives. The Transportation Engineer will determine road construction, reconstruction, maintenance, storage, and decommissioning costs. The Transportation Engineer will also coordinate with other specialists to determine the level and type of road decommissioning and/or storage required to meet resource needs and objectives. We will ensure all constructed, reconstructed, maintained, and/or decommissioned roads meet Colville National Forest standards. The following data are available or are needed for these analyses:

- 1:15,840 aerial photography flown of the project area by the Colville NF
- Topographic information from the Shuttle Radar Topographic Mission (SRTM)
- Forest Service INFRA data set consisting of a roads event layer and event tables
- Data sets associated with the Colville NF Transportation Analysis Process (TAP)
- Non-corporate INFRA data set consisting of a roads event layer and event tables
- Field verification of available data sets will be conducted to establish a reliable map of the existing road network within the project area. Field verification of all proposed roads will be conducted to establish a reliable layer necessary for the IDT effects analysis.
- Road condition surveys will be conducted on all system and non-system roads. We will develop Road Cards for data collection. The Road Card will be the one place that all data collected by the specialist will be compiled to address the specific concerns with each route and how it will be addressed. Road surveys will be comprehensive, addressing not only Transportation Engineer issues, but also needs of other Resource Specialists. These needs are noted in the Resource Specialist specifications that follow.
- Capacity of existing logging equipment will be researched in order to help determine road spacing for all mid-slope and ridge top roads
- Rock sources to be used in construction or reconstruction of roads will be located

We will prepare a Roads Analysis Report (RAR) for the project area that follows the six-step roads analysis procedure outlined in Forest Service Handbook 7709.55, and Misc. Report FS-643. The RAR will be a separate document from the EAs. A draft of the RAR will be submitted with the DEA so that public comment and involvement may be obtained. The RAR must be concise and consistent with the final EA. Guidance is found at FSH 7709.55, FSM 7700, and in the USFS Region 2 Road Analysis Guide. Approval from the Responsible Official or their Delegated Official will be needed for the RAR.

Fish passage structure construction and reconstruction will be assessed using culvert condition information compiled by the Fisheries Biologist along with road condition surveys described above. Fish passage structures will be designed to meet all state and federal guidelines as outlined by the Colville National Forest Plan and the Washington Department of Fish and Wildlife's Fish Passage Program. Water crossings will need to be evaluated on an individual basis to determine adequacy. Some crossings may be visually inspected for sufficiency; the rest will need to be calculated individually to see if they meet current standards. Those not meeting current standards will be addressed on the road card and replacement sizing will be suggested.

### *Logging Engineer*

The initial interview with the Forest Service Logging Systems Specialist was conducted following review of Appendix A of the solicitation and a preliminary reconnaissance of the planning area. From this interview and review, an approach to logging systems analysis was developed as detailed below. Potential issues and issue indicators include:

- Acres and cut volume of proposed harvest by logging system
- Planned skid trail and yarding corridor density
- External yarding/skidding distance
- Detailed logging and haul costs
- Pond log values and market demand
- Logging systems equipment availability and planned deployment
- Stand retention and planned logging systems

During Phase 1, we will develop a logging systems and transportation analysis (LSTA) for federal forest land located in the planning area and those road systems providing access to the planning area. The LSTA will be developed by the team Logging Engineer using the most recent stereo aerial photography and the best available remote sensing data. Development of the LSTA shall follow the guidance provided by the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook, and FSH 2409.17 silvicultural practices handbook including 2409.17-2011-1 August 29, 2011 (Region 6 Supplement). We will also consider silvicultural guidelines developed by NEWFC. The LSTA will be an important basis for development of the Proposed Action and will also be used in Phase 2 to develop alternatives. The LSTA will be incorporated in the Specialist report and will include:

- Setting polygons following logical logging limits, resource constraints and features, significant terrain features, property lines, stand types, and road systems

- Primary and secondary logging systems
- Yarding direction (uphill/downhill)
- Silvicultural prescription capability
- Cut volume
- Landings

Following development of the Proposed Action and action alternatives, the Logging Engineer will work to field verify the LSTA to the extent necessary to support NEPA analysis. This will include: verification of the planned logging system, including skyline payload analysis using Skyline XL where appropriate; flagging and GPS mapping of unit corners and critical unit lines (i.e., stream buffers) in the field; location of planned landings; planned landing survey to determine landing geometry, logging operations constraints (i.e., decking), and availability of cable logging equipment anchors; determination of the need for and availability of tail trees and stump anchors; and development of a conceptual skid trail plan for all units proposed for ground-based logging systems.

Field verification results will be documented in unit summary reports, including map sketch, GPS data, and any logging systems analysis such as Skyline XL output. LSTA GIS layers will be updated from field verification results. The logging engineer will perform an effects analysis in collaboration with the IDT for all action alternatives and will develop a logging systems and timber economics resource report detailing this analysis. The logging systems and timber economics resource report will follow report examples used by the Colville National Forest.

### *Hydrologist*

We have completed initial interviews with the Forest Service Hydrologist, conducted field reconnaissance of watershed conditions, and have reviewed the requirements for the Hydrologist in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Water quality affected by project actions
- Sediment generated by logging and roads
- Streamflow regimes altered by harvest, wildfire, and roads
- Elevated water temperature, fecal coliform, and turbidity
- Effects of sediment and water yield on channels and fish habitat

We will provide a professional opinion regarding compliance with the Clean Water Act Executive Orders 11988 (floodplains) and 11990 (wetlands) and water resource-related standards and guidelines within the CNF Plan. These determinations will ensure that the logging and road plans appropriately avoid wetlands, floodplains, and sediment delivery

hazards, and maintain or lead to increases in stream shade. Information required includes outcomes from logging and road plan reviews and sediment delivery analysis described below, peak flow analysis described below, and mass wasting analysis conducted by the Soil Scientist.

We will determine existing conditions and requirements related to 303(d) listed streams and TMDL requirements. The following data are available or are needed for these analyses:

- 303(d) listings and requirements are available from the Washington DEQ website

Sediment delivery analysis will be conducted to determine quantity of sediment generated by logging and roads. WEPP FuME will be used to assess landscape level sediment delivery from slopes and roads. WEPP ROAD will be used to assess road segment-specific sediment delivery. The entire road system within Mill Creek watersheds will be analyzed. Note that WEPP ROAD will allow us to demonstrate road-specific effects of the alternatives and identify geo-located mitigation/stewardship opportunities. WEPP FuME will allow us to evaluate sediment delivery under different logging, fuel treatment, and wildfire scenarios. WEPP models are available via the web. The following data are available or are needed for these analyses:

- Slope classifications data will be derived from available USGS DEMs
- Soil mapping, including erosion potential, is available from NCRS
- A field verified road network will be developed by the Forest Engineer.
- A field verified stream network data set will be developed by the Fisheries Biologist
- Segment-specific road features (e.g. prism, surface) need to be measured. Road condition surveys conducted by the Transportation Engineer will also collect information needed by the Hydrologist to assess road related sediment delivery.

We will analyze increases in peak flows to determine whether or not they will cause detrimental stream channel change or decrease in bank stability (Colville Forest Plan standards). The Washington Watershed Analysis peak flow analysis modeling process will be used to predict peak flow increases associated with management alternatives and potential wildfire circumstances. The following data are available or are needed for these analyses:

- Precipitation zones available from the Colville National Forest website
- 24-hour precipitation amounts by return interval derived from the NOAA atlas
- Wind speed average and standard deviation from SNOTEL and weather station data
- Flood-frequency relationships derived from USGS flow monitoring data
- Cover type maps developed by the Silviculturalist will also include information useful for assessment of hydrologic maturity

We will analyze planned actions to determine whether or not they will cause detrimental stream channel change or decrease in bank stability (Colville Forest Plan standards), and to

identify stream channel/fisheries habitat stewardship opportunities. Information required includes outcomes from logging and road plan reviews, sediment delivery analysis, peak flow analysis, mass wasting analysis, and stream channel conditions surveys. We also need to collect the following information to support this assessment:

- Recent and historic sets of aerial photography (1:15,840 and other) flown of the project area by the Colville NF and/or available from other sources will be used to determine alteration of the stream channel from historic conditions. Findings will be field verified.
- Stream surveys conducted by the Fisheries Biologist will also collect information needed by the Hydrologist to assess channel sensitivity

### *Soil Scientist*

We have completed initial interviews with the Forest Service Soil Scientist, conducted field reconnaissance of soil conditions, and have reviewed the requirements for the Soil Scientist in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Detrimental effects on soil conditions
- Erosion associated with logging and roads
- Erosion associated with wildfire
- Mass wasting from logging and roads

We will determine existing and potential future percent area exhibiting soil surface erosion and soil disturbance (Ref. FSM2520 R6 Supplement 2500-98-1). Determinations will be made through transect-based field survey of existing levels of soil disturbance, compaction, and erosion due to previous ground-based logging. Transects will be located via statistically-based protocols to be developed, and the National Soil Disturbance Monitoring Protocol. The following data are available or are needed for these analyses:

- Soils and land type association GIS layers available from FS and NRCS

We will determine mass wasting hazards per CNF Forest Plan soil standards that require identification of areas with high mass failure potential. Determinations will be made by identifying past landslides through review of multiple sets of stereo photography strategically selected through time and by identification of similar circumstances and landscape characteristics where potential may be high. The following data are available or are needed for these analyses:

- Recent and historic sets of aerial photography (1:15,840 and other) flown of the project area by the Colville NF and/or available from other sources
- DEM and LiDAR or similar remote data are available to supplement aerial photos

*Fisheries Biologist*

We have completed initial interviews with the Forest Service Fisheries Biologist and have reviewed the requirements for the Fisheries Biologist in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Width/depth ratio
- Pool frequency
- Large woody debris
- Fine sediment levels
- Stream temperature
- Channel connectivity
- Fish passage
- Livestock access to habitat
- Viability of native fish species

Prescription development will require an understanding of fish distribution and conditions of fish habitat in the project area. Overall, we will ensure that the Inland Native Fish Strategy (INFISH) Riparian Habitat Conservation Areas (RHCA) standards and guidelines are analyzed for each alternative. This will require collaboration with the Transportation Engineer, Logging Engineer, Silviculturalist, and Wildlife Biologist, at a minimum. The objective will be to ensure that riparian buffers fully provide for large woody debris recruitment and stream shade, and to prevent sediment from reaching streams, as well as other meeting other resource objectives.

We will identify, map (GIS), and classify all known and surveyed fish-bearing streams and all road crossings. The following data are available or are needed for these analyses:

- Stream network in the Colville NF Hydrogeo geodatabase, Hydrography feature class
- National Hydrography Data (NHDPlus) providing GIS-based stream classifications
- Fish Distribution Layer derived from fish surveys in the Colville NF
- Modeled Fish Distribution Layer from Colville NF depicting Class I, II, III, IV streams
- Fish distribution data from Washington Department of Fish and Wildlife
- Non-corporate Culvert Inventory data sets from the Colville NF
- National Wetland Inventory data from the Department of Interior
- Data sets associated with the Colville NF Transportation Analysis Process (TAP)
- Non-corporate INFRA data set consisting of a roads event layer and event tables
- A field verified road network developed by the Transportation Engineers
- Field verification of the extent of streams, stream classifications, and fish passage will be conducted to establish a reliable map of the stream network within the project area in

areas potentially affected by the Proposed Action and alternatives. Survey effort will vary depending on probability of species occurrence. Survey effort will range from 100% coverage in high probability areas to lower levels in low probability areas.

We will identify, map, characterize, and rate habitat conditions (based on meeting INFISH threshold criteria) fish bearing streams that are included in the Stream Management, Analysis, Reporting, and Tracking (SMART) system. These analyses validate the baseline conditions for the Planning area. The following data are available or are needed for these analyses:

- Most recent 1:15,840 aerial photography flown of the project area by the Colville NF.
- Stream Management, Analysis, Reporting, and Tracking (SMART) system data sets containing fish habitat metrics
- Mill Creek NorWest Regional Stream Temperature Model data
- Salmon and Steelhead Habitat Inventory and Assessment Program data from WDFW
- Most recent digital high resolution aerial photos of the project area
- Field assessment of in-channel substrate; fine sediment, percent embeddedness or percent surface fines; and channel width-depth ratio will be needed to augment existing data. This assessment will be conducted on key reaches sensitive to additions of sediment, wood, and water. We will focus on low-gradient fish-bearing response reaches, further refined to identify key reaches to be investigated based on Rosgen classifications. This effort will be coordinated with the Hydrologist.

We will identify, map (GIS) and describe resource-specific opportunities as they relate to restoring fisheries resources including hydraulic alterations and livestock exclusion. The following data are available or needed for these analyses:

- Sites identified in CNF Fisheries staff reports that if restored would provide properly functioning conditions and locations of past streambank/riparian restoration areas
- The Forest Service has survey information specific to the planning area on grazing allotments in the Management Direction geodatabase, RMU feature class
- Fence mapping is available from the Forest Service. Permit files will also provide background on other management features (e.g., water sources, trailing, etc.)
- Cover type maps developed by the Silviculturalist will also include information useful for assessment of changes in vegetation patterns
- The Logging System and Transportation Analysis (LTSA) developed by the Transportation Engineer and Logging Engineer will provide information to the Fisheries Biologist useful for assessment of livestock access to streams

*Wildlife Biologist*

We have completed initial interviews with the Forest Service Wildlife Biologist and have reviewed the requirements for the Wildlife Biologist in Solicitation Appendix A. Below we outline a series of analyses that would address likely issues we have identified. Potential issues and issue indicators include:

- Abundance, distribution, and structure of terrestrial species habitat (endangered and threatened, Colville National Forest sensitive, and management indicator species) and the continued capability of the watershed to support viable populations.
- Acres of Canada lynx habitat affected and mitigation for impacts to such habitat.
- Change in big game winter range resulting from commercial harvest and stewardship.
- Acres of core areas and potential travel corridors for pine marten, pileated woodpecker, and barred owl affected by commercial harvest and stewardship activities.
- Forest structural change to achieve historic stand structure and variability. Forest structure will be assessed by the Silviculturalist and cover type maps and stand exams will also collect information useful for assessment by the Wildlife Biologist.
- Acres of harvest in identified old growth stands or stands with large trees (>21" dbh). The extent of old growth stands and stands with large trees will be identified by the Vegetation Specialist and this information will be used by the Wildlife Biologist for assessment of wildlife effects.
- Net result in road miles (open and restricted), including decommissioning (tied to road density related to wildlife habitat requirements). The net change in the road system will be analyzed by the Transportation Engineer; this information will be used by the Wildlife Biologist for assessment of wildlife effects.
- Potential changes in snag abundance as a result of commercial harvest and stewardship activities. Cover typing and stand exams conducted by the Silviculturalist will collect information needed by the Wildlife Biologist to assess wildlife-related impacts.
- Potential changes in aspen stands as a result of commercial harvest and stewardship activities. Cover typing and stand exams conducted by the Silviculturalist will collect information needed by the Wildlife Biologist to assess wildlife-related impacts.

Silvicultural prescription development will require input from the Wildlife Biologist. Prescription development and vegetative analysis shall follow the guidance provided by the Land and Resource Management Plan – Colville National Forest (1988) (Colville Forest Plan), Regional Forester Forest Plan Amendment #2 (Eastside Screens), Inland Native Fish Strategy (INFISH), Stevens County Community Wildfire Protection Plan (CWPP), 60.2 Objectives - FSH 2409.19 Chapter 60 - Stewardship Contracting Handbook (Stewardship Handbook, and FSH 2409.17 silvicultural practices handbook including 2409.17-2011-1 August 29, 2011 (Region 6

Supplement). We will also consider silvicultural guidelines developed by NEWFC. The goal will be to ensure that forest stand structures meet habitat objectives for the project.

We will identify and map (GIS) all known and surveyed wildlife habitat conservation areas including but not limited to the following: big game winter range, goshawk nest sites, lynx habitat, pine marten, pileated woodpecker and barred owl conservation core and corridors. Analyses will address Forest management indicator species (MIS) including viability assessment, landbirds and sensitive species, and ESA listed species. Snag-dependent species habitat analysis will include use of the DecAid model. Direction for landbirds is found at: Altman, B. 2000. Conservation Strategy for Landbirds in the Northern Rocky Mountains of Eastern Oregon and Washington. American Bird Conservancy, Corvallis, OR. 128 pp. Analyses will also calculate elk habitat effectiveness. The following data are available or are needed for these analyses:

- The Forest Service has survey information specific to the planning area on elk, threatened and endangered species, and MIS and sensitive species core areas
- The Washington Natural Heritage Program provides records on special status species
- Cover type maps developed by the Silviculturalist will also include information useful for assessment of MIS and special status species
- Detailed stand exams conducted by the Silviculturalist will also collect information useful for assessment of MIS and special status species
- Other data or information may be collected from sources such as the Washington Department of Fish and Wildlife, scientific publications, etc.
- Where adequate information does not exist, surveys for sign of MIS or special status species will be conducted by the Wildlife Biologist in stands listed for commercial harvest and stewardship in the Proposed Action and alternatives. Survey effort will vary depending on probability of species occurrence. Survey effort will range from 100% coverage in high probability areas to lower levels in low probability areas.

#### *Vegetation Specialist*

We have completed initial interviews with the Forest Service Botanist and Range Specialist and have reviewed the requirements for the Botanist in Solicitation Appendix A. Below we outline a series of analyses that would address likely issues we have identified. Potential issues and issue indicators include:

- Abundance and distribution of threatened, endangered, and sensitive plant populations and the continued capability of the area to support viable populations
- Acres of old growth stands proposed for treatment and anticipated effects of those treatments, and acres of untreated old growth stands within the planning area
- Projected change in livestock forage production acres
- Projected change in acres invaded by noxious weeds

- Projected change in meadow and grassland acreage
- Projected change to livestock use

We will identify and map threatened, endangered, and sensitive plant populations within the planning area. The following data resources are available or are needed for these analyses:

- The Forest Service has survey information specific to the planning area in their “non-corporate” data base. These data provide an extensive survey of plant occurrences.
- The Washington Natural Heritage Program provides records on special status species
- Special status plant surveys will be conducted in areas identified for commercial harvest and stewardship activities in the Proposed Action and alternatives. Survey effort will vary depending on probability of species occurrence. Survey effort will range from 100% coverage in high probability areas to lower levels in low probability areas.

The extent of old growth stands will be determined using information in the Forest Service Management Direction geodatabase, Resource Management feature class. Stands with large trees (>21” dbh) will be identified by the Silviculturalist via stand structure classifications. The following additional data resources will be developed for these analyses:

- Cover type maps developed by the Silviculturalist will also collect information useful for assessment of old growth and stands with large trees
- Detailed stand exams conducted by the Silviculturalist will also collect information useful for assessment old growth stands and stands with large trees

Changes in livestock forage, noxious weeds, and forest encroachment into meadows will be assessed by measuring projected change in forest cover from commercial harvest and stewardship activities and by estimating associated changes in forage, weeds, meadows, and encroachment. The following data resources are available or are needed for these analyses:

- Noxious weed mapping is available from the Forest Service to support this analysis.
- Cover type maps developed by the Silviculturalist will also include data useful for assessment of forage, weeds, meadows, and encroachment
- Detailed stand exams conducted by the Silviculturalist will also collect information useful for livestock forage, weeds, meadows, and encroachment

Changes in livestock use will be assessed qualitatively in consideration of existing livestock use, existing and planned vegetation patterns, existing and planned landings, grazing allotments and fencing, stream networks (water sources), and existing and planned roads. The following data resources are available or are needed for these analyses:

- The Forest Service has survey information specific to the planning area on grazing allotments in the Management Direction geodatabase, RMU feature class

- Fence mapping is available from the Forest Service. Permit files will also provide background on other management features (e.g., water sources, trailing, etc.)
- Cover type maps developed by the Silviculturalist will also include information useful for assessment of changes in vegetation patterns
- The Logging System and Transportation Analysis (LTSA) developed by the Transportation Engineer and Logging Engineer will provide information to the Vegetation Specialist useful for assessment of existing and planned landings and roads
- A field-verified stream network will be developed by the Fisheries Biologist

### *Archaeologist*

We have completed initial interviews with the Forest Service Archaeologist and have reviewed the requirements for the Archaeologist in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Effects to sites protected under the National Historic Preservation Act (NHPA)
- Effects to tribal cultural uses of the project area

We will identify and map all known and surveyed project area heritage sites. The following data are available or are needed for these analyses:

- Non-corporate cultural resources database available from the Colville NF
- Washington State Department of Archaeology and Historic Preservation (DAHP) records available through the Washington Information System for Architectural and Archaeological Records Data (WISAARD)
- Hardcopy cultural records available at the Colville NF Supervisor's Office
- Field surveys will need to be conducted to Section 106 and Washington State Historic Preservation Office (SHPO) standards to identify cultural resources in areas of potential ground disturbance. Survey effort will vary depending on heritage site probability as determined by the EXTANT model. Survey effort will range from 100% coverage in high probability areas to 10% in low probability areas.

Government-to-government consultation with affected tribes (Colville Confederated Tribes, Kalispel Tribe, and Spokane Tribe) will be conducted by the Forest Service using materials prepared by the Project Manager, NEPA Specialist, and Archaeologist. Any findings of this consultation will be shared with the Archaeologist in order to assess potential effects of project activities on tribal cultural resources or use of the project area.

Overall, in preparing the Archaeologist Specialist Report, we will work closely with the Colville Nation Forest Archeologist to ensure documents meet Section 106 Clearance from the State

Historic Preservation Officer (SHPO). This Specialist Report will be filed prior to the Draft EA. The field survey results along with the extant cultural resources site information will define the cultural Affected Environment portion of the EA.

### *Recreation/Visual*

We have completed initial interviews with the Forest Service Recreation Specialist and have reviewed the requirements for the Recreation/Visual in Solicitation Appendix A. Below we outline a series of analyses that would robustly address likely issues we have identified. Potential issues and issue indicators include:

- Recreation use displaced or detrimentally affected by project activities
- Changes in the number and size of dispersed recreation camp sites
- Changes in illegal off-highway vehicle (OHV) use
- Maintaining visual quality objectives

We will identify, map (GIS), and classify all known and surveyed recreation sites (e.g., designated travel loops, dispersed camping sites, OHV trails) as defined in the Colville National Forest Plan and will qualitatively assess the potential for project activities to displace or detrimentally affect these recreation sites. The following data are available or are needed:

- Dispersed recreation camps are available from the Colville NF corporate database
- OHV trails are available from the INFRA (infrastructure) database
- Field verification of dispersed campsites and OHV trails will be conducted within, along, and near planned project activities (e.g., logging units, stewardship sites, access roads)

Changes in dispersed campsite use and illegal OHV trail use will be made in consideration of access created by planned activities to suitable campsite or trail sites. Of key concern are new camp sites or illegal trail access created in harvest units, at landings, or along new system or temporary roads. This analysis will be conducted qualitatively. The following data are available or are needed to conduct this analysis:

- Cover type maps developed by the Silviculturalist will also include information useful for assessment of recreation suitability (e.g., meadows for camps or low density stand conditions for trail creation)
- Soils information from the LTA data set indicate suitable soils for recreation
- National Hydrology Data (NHD) indicate proximity to water influencing recreation use

Scenery assessments will be conducted—via viewshed analysis from recreation sites and other key observation points provided by the Forest Service—that quantifies the amount of visual change occurring from harvest and stewardship activities, including post-treatment vegetation conditions created. The following data are available or are needed to conduct this analysis:

- Topographic information from the Shuttle Radar Topographic Mission (SRTM)
- Management Direction geodatabase, Visual quality feature class
- Vegetation cover type mapping by the Silviculturalist will be used to characterize pre-treatment stand structure
- A field-verified road network database developed by the Transportation Engineer will be used to characterize pre-treatment infrastructure

### Deliverables

- Field data collection and data analysis protocols (leading sections of Specialist reports)
- Comprehensive geospatial data set of vegetation cover types and associated attributes required to support resource-specific analyses by several IDT Resource Specialists.
- Other geospatial data sets derived from existing data and/or from resource analyses
- Field data collection in areas affected by commercial harvest and stewardship:
  - Stand exams per Forest Service protocols, including collection of additional data attributes needed to support Fire/Fuels, Vegetation, and Wildlife analyses and field verification of cover type mapping and associated attributes
  - Field verification of the road network and road condition surveys, including data attributes needed to support Hydrologist and Fisheries Biologist analyses
  - Field verification of the stream network and fish extent/habitat surveys, including data attributes needed to support Hydrologist analyses
  - Field verification of the LSTA and location of unit corners and critical unit lines
  - Transect-based soil surveys to assess disturbance, compaction, and erosion
  - Special status and MIS wildlife population/occurrence surveys
  - Special status plant species population/occurrence surveys
  - Cultural resource surveys for Section 106 clearance
  - Field verification of dispersed campsites and OHV trails
- Draft and final resource Specialist Reports following guidelines above
- Spatial data sets identifying the Proposed Action and action alternative activities
- Draft and final Road Analysis Report

Approval from the Responsible Official (Forest Supervisor) or their Delegated Official (District Ranger) will be needed for the preliminary effects analyses at key development points, RAR, and it will be needed for revisions to the Proposed Action and action alternatives, if changes occur.

Compilation of deliverables into the Project Record will be coordinated by the Writer/Editor. Overall, it is understood that all field data, project documents and reports and references shall be submitted to the Forest Service upon request. We will provide any data, reference material or other project documents (e.g., case studies, research results, other NEPA documents) used as

part of, or to support, project analysis to the Forest Service upon request. Field data, project documents and reports and references shall not be released to outside organizations or agencies without written consent from the Forest Service.

#### **Phase 4 – Draft EA/BE/BA development, public comment, and final documents**

##### Overview

The objective of this phase is to prepare the Draft Environmental Assessment in parallel with Phases 1 through 3 outlined above. This strategy allows us to spread out production and review over a longer period, decreasing overall time for analysis and document preparation. The document will be developed incrementally as follows:

*Chapter 1, Purpose and Need*—The CFS NEPA Specialist will draft content for Chapter 1 covering the Introduction, Proposal and Background, Purpose and Need, Regulatory Requirements, and Project Area Management Direction sections. This will be based on information gained during Phase 1. It will be important to clearly identify project objectives. Information compiled during this phase will be formalized within the chapter format and content.

*Chapter 1, Issues*—The CFS NEPA Specialist will draft content for Chapter 1 covering the Issues section. We anticipate collaboration in Phase 2 will lead to identifying additional objectives to be considered in evaluating the project—these will all be captured under the umbrella topic of Issues in Chapter 1. This will serve as the basis for Alternatives Development and for Alternatives Considered and Issue Indicators in NEPA Document Preparation. Resource Area Leads and Specialists will review topic-area issues in development of this Chapter 1 content.

*Chapter 2, Alternatives Considered and Chapter 3, Issue Indicators*—Based on the outcome of alternatives development in Phase 2, the CFS NEPA Specialist will draft a) content for Chapter 2 covering the Introduction, Alternatives Considered but Eliminated from Detailed Analysis, Alternatives Considered in Detail, and Elements Common to All Action Alternatives sections, and b) content for Chapter 3 covering the Resource Affected and Significant Issue Indicators. Resource Area Leads and Specialists will be asked to develop Significant Issue Indicators.

*Chapter 3, Affected Environment and Environmental Consequences*—The CFS Project Manager, NEPA Specialist, CFS Writer/Editor, and GIS/DB Manager will incorporate relevant content directly from the Specialist Reports into Chapter 3—covering the Introduction, Forest Plan Direction, Scope of Analysis, Affected Environment, Environmental Effects (Direct, Indirect, and Cumulative Effects), Forest Plan Consistency, and Irreversible and Irretrievable Commitment of Resources sections. To the extent possible, Resource Leads and Specialists will follow a

consistent style guide when drafting their Specialist Reports. However, we anticipate that substantial editing will be needed to bring the content into a consistent, readable form.

*Draft EA*— The CFS Project Manager and NEPA Specialist, and the CFS Writer/Editor and GIS/DB Manager, will complete final content and formatting for preparation of the Draft NEPA document that will be issued for Public Comment. This will entail incorporating additional content from the Specialist Reports (e.g., Mitigation Measures, Monitoring and Evaluation, etc.), and selected Appendices. It will also entail completion of key sections not yet addressed, including Proposed Action, Public Involvement, Decision to be Made, Comparison of Alternatives, and Implementation Plan. All content will be formatted according to Forest Service specifications for approval by the Responsible Official or Delegated Official. This draft will be ready for publishing in hardcopy and electronic form.

Once a Draft EA is approved by the Responsible Official or their Delegated Official, the CFS Project Manager and NEPA Specialist will prepare for and solicit public comment on the Draft EA. Appropriate means of distribution and of requesting public comments will be determined in collaboration with the Forest Service. This document will be released for a 30-day comment period. The CFS Writer/Editor will be responsible for compiling all comments into a public comments database to facilitate their review in subsequent tasks.

The CFS Project Manager and NEPA Specialist will facilitate the preparation of responses to comments received during the 30-day comment period. Resource Leads and Specialists will be asked to prepare responses specific to their resource areas. These responses will form the basis for revision of the Draft NEPA document and preparation of a Final NEPA document. Responses will be subject to review and approval by the Responsible Official or Delegated Official.

The CFS Project Manager and NEPA Specialist will oversee preparation of the final EA. Revisions will address substantive comments. Resource Leads and Specialists will be asked to revise content as needed. At this time, Resource Specialists will also compile Biological Assessments/Biological Evaluations from content in the Final EA and Specialists Reports to satisfy Section 7 consultation. Approval from the Responsible Official (Forest Supervisor) or their Delegated Official (District Ranger) will be needed for the Final EA and BE/BA.

### Specifications

The following specifications guiding NEPA document preparation are incorporated verbatim from the Solicitation Appendix A:

*Draft and Final EA Distribution:* CFS will complete, including formatting, a draft and final EA for public distribution. CFS will furnish distribution-ready review copies of each draft and final versions to the Forest Service for approval prior to CFS printing them for distribution. The document is expected to include both black & white, and color reproductions.

*Background and Support Materials for the EAs:* Support materials may be separate documents such as Technical Reports. Support materials may be included in the EAs by reference. Support data may be included in an appendix or placed in the Project Record. The purpose of background and support materials shall be to provide backup data for the environmental analysis while minimizing the length of the document, reducing the amount of technical information of interest to a limited audience, and/or organizing information so it is available if requested under the Freedom of Information Act. Technical Reports, background and support materials, by reference, shall be an extension of the EA. Important conclusions shall be incorporated into the NEPA document along with the cause and effect relationship. An exhaustive description of resource data that is not pertinent to the decision to be made is not appropriate in the EAs.

*Draft EA:* CFS shall develop and provide one electronic copy and one hard copy of the draft EA for internal review by the Forest Service COR, Specialists, and the Responsible Official or their delegated official. The draft EA shall follow the outline developed above by the Forest Service, and it shall be complete. Any graphics within the document shall be inserted into the Microsoft Word computer file or attached as PDF files. Support materials shall be arranged in appendices or separate reports and files that are in the Project Record. Information needed to immediately interpret or understand the EAs shall be contained in an Appendix. Specialist's Reports shall be stand-alone documents, included in the EAs by reference. Relevant information from these reports should be integrated in the EAs.

*Final EA:* CFS shall revise the draft EA based on Forest Service and public comments, and prepare and provide one electronic copy and one hard copy of the final EA for internal review by the Forest Service COR, Specialists, and the Responsible Official or their delegated official. Forest Service personnel will have 2 weeks (10 working days) to review the document and provide feedback. CFS will have 2 weeks to incorporate Forest Service edits. The final EA shall follow the outline developed above by the Forest Service. Graphics within the document shall be inserted into the Microsoft Word computer file or attached as PDF files.

The following specifications guiding public comment on the draft EA are incorporated verbatim from the Solicitation Appendix A:

*Facilitating the administrative review process:* The project manager is also required to adhere to applicable administrative review processes, either: 36CFR 215.1-215.7 Notice and Comment (<http://www.fs.fed.us/emc/applit/36cfr215.htm>) or 36 CFR 218 (<http://www.fs.fed.us/emc/applit/36cfr218a.htm>) and Forest Service Handbook 1509.12.

*30 (EA) or 45 (EIS)-Day Comment Period Responses:* CFS shall provide the Forest Service with a draft copy for review of all 30 or 45-day comment period Response document(s) received on the draft EA prior to their placement in the final EA. The Forest Service shall review, edit, and return the draft within 10 working days of submittal. CFS shall provide all public comments received during the 30 or 45-Day comment period to the Forest Service within 10 working days following the end of the comment period. Any additional public comments received outside of the 30 or 45-Day comment period by CFS shall be provided to the Forest Service COR within five working days of receipt.

*Collecting and Incorporating Comments from the Public:* The term "public" includes whoever wants to receive a copy of a Forest Service released document or whoever has expressed an interest in the project during any portion of the project development or analysis. Public comments may range from corrections to grammar and punctuation to discrepancies with technical and scientific information. Depending on the number of people who make comments throughout the process, the task of collecting and incorporating applicable comments may be substantial. The Forest Service as lead Agency, and CFS, must consider and respond to comments that may come from the public, local and state government agencies, other Federal agencies, and industry. Depending on the nature of the comments, the changes may need to be extensive to the analysis document. As a result, CFS may not be able to complete the draft of the document in the timeframes initially agreed upon. Therefore, some slip in the timeline may result in order to complete a document that meets the needs of the responsible official. Potential problems and/or delays to the timelines shall be communicated to the COR as soon as possible.

*Analysis of the comments received during the comment period:* CFS shall compile and analyze comments received on the draft EA released for a 30-day CE/EA comment period or 45-Day comment period for an EIS (36 CFR 215 or 36 CFR 218). The Forest Service will review the list of substantive comments prior to CFS initiating responses. Upon completion of analysis, review and comment, the Forest Service may provide review and feedback prior to signing off on their completion. After review by the Forest Service, the comment letters will be scanned and, along with CFS's responses (after Forest Service approval), will become an appendix to the decision document. All public comments received shall become part of the project record. If comments on the draft EA are extensive and require substantial changes to the draft EA, the Forest Service

may require a supplement draft EA be prepared and sent out for another 30 or 45-Day Comment Period prior to preparing the final EA.

*Need for a Supplemental EA/EIS/CE:* If comments on the DEA are extensive and require substantial changes to the content or analysis contained in the DEA, the Forest Service may require CFS to issue a supplement to the draft EA, or a revised DEA, for further public comment prior to preparing the final EA. In the event of such an occurrence, the Forest Service may issue a contract modification.

The following specifications guiding preparation of BE/BAs are incorporated verbatim from the Solicitation Appendix A:

*BEs/BAs:* CFS shall write the Biological Assessments (BAs) for Section 7 Consultation with the U.S. Fish and Wildlife Service and the Biological Evaluations (BEs) for sensitive species. The BAs shall be based on the preferred alternative and the BEs shall be based on the alternatives analyzed in detail. Prepare a BE for sensitive botanical species and a BA for ESA listed botanical species. Prepare a BE for sensitive wildlife species and a BA for ESA listed species. Prepare a BE for sensitive fish species (a Biological Assessment for Endangered Species Act (ESA) listed species is not anticipated at this time as bull trout are not known to occupy the project area).

*Biological Evaluations/Biological Assessments (BEs/BAs):* Biological Assessment: Write the BEs/BAs for Section 7 Consultation with the U.S. Fish and Wildlife Service. The BAs for consultation with the U.S. Fish and Wildlife Service will address effects the proposed selected alternative will have on terrestrial (botanical and wildlife) ESA listed species. The BEs will address the effects the alternatives analyzed in detail will have on sensitive terrestrial (botanical and terrestrial) and aquatic species. The BEs/BAs shall be in accordance with the following:

- a) Contracted Fisheries Biologist, Wildlife Biologist, and Forest Vegetation Specialist shall be qualified biologists and silviculturists with at least a Bachelors degree in biological sciences.
- b) CFS shall collect necessary data including interviewing knowledgeable individuals to prepare the BEs/BAs.
- d) Unless formal consultation is required the contractor shall submit the BE/BA to the US Fish and Wildlife Service with a copy of the BE/BA plus cover letter sent to the USFS.
- e) CFS may talk directly with the U.S. Fish and Wildlife Service; however, the COR shall be kept informed of pertinent issues and developments.
- f) The Action Area for impacts analysis shall center on the project area, but may include as much area as required to fully analyze the direct, indirect & cumulative impacts of the

Forest Service preferred alternative (i.e. discussions of impacts in the BAs may include the entire range of a species).

g) The BAs shall contain the standard BA requirements found in FSM 2672.4.

h) The Forest Service will approve the determinations of effect.

Formal consultation with the U.S. Fish and Wildlife Service will be the responsibility of the Forest Service. The BAs will be provided to the Forest Service in a final form and acceptable for submission to the U.S. Fish and Wildlife Service. If formal consultation with the US Fish and Wildlife Service is required the Forest Service will review all draft materials. Generally, one review will be sufficient prior to printing final materials. However, based upon the amount or complexity of the Forest Service's revision comments, the Forest Service shall have the option of reviewing drafts until they are revised to the Forest Service's satisfaction.

#### Deliverables

- Draft EA sections:
  - Chapter 1, Purpose and Need
  - Chapter 1, Issues
  - Chapter 2, Alternatives Considered and Chapter 3, Issue Indicators
  - Chapter 3, Affected Environment and Environmental Consequences
- Draft EA
- Public comments database
- Response to comments
- Final EA
- BE/BA
  - Botanical species
  - Wildlife species
  - Fish species

Approval from the Responsible Official (Forest Supervisor) or their Delegated Official (District Ranger) will be needed for the Draft EA, response to comments, Final EA, and BE/BA.

Compilation of deliverables into the Project Record will be coordinated by the CFS Writer/Editor. Overall, it is understood that all field data, project documents and reports and references shall be submitted to the Forest Service upon request. We will provide any data, reference material or other project documents (e.g., case studies, research results, other NEPA documents) used as part of, or to support, project analysis to the Forest Service upon request. Field data, project documents and reports and references shall not be released to outside organizations or agencies without written consent from the Forest Service.

## Project Management

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Project management will be an on-going task throughout NEPA analysis. Four specific areas of responsibility are specified below—Project Manager, NEPA Specialist, Writer/Editor, and GIS Analyst—based on specifications in Solicitation Appendix A. These represent the guidelines by which these individuals will work collectively to achieve project objectives.

### Project Manager

The Project Manager will implement project management standard practices to ensure that the IDT meets scheduled deadlines. All CFS staff and subcontractor tasks will be assigned on a task order basis. Task orders will include detailed task and activity-level instructions, deliverables that tie directly to the work plan, periods of performance (including key milestones), and estimate costs. Task orders will be issued for each planning area and phase. This will be the primary mechanism by which the Project Manager sets expectations for contract performance and against which staff and subcontractor performance will be measured. The Project Manager will be in constant communication with CFS staff to ensure that tasks are proceeding on time, within budget, and in accordance with contract expectations and specifications outlined above. Any bottlenecks to progress will be identified and we will quickly work to resolve critical paths as soon as possible to ensure project deliverables are produced on time. This includes working closely with the Forest Service's Contracting Officer's Representative (COR) to ensure potential roadblocks for meeting deadlines are addressed early on to minimize potential delays. CFS subcontractor agreements include several mechanisms for corrective action, if needed. But, we will work diligently with our staff and subcontractors to ensure smooth execution of the project.

*Coordination with COR:* Communicate at least bi-monthly (i.e. every other week) with the COR to coordinate activities, and provide updates of progress and key developments, using phone, e-mail, or site visits. The Project Manager is responsible for communicating directly with the COR to request specific information required from the Forest Service. Requests for information from the Forest Service will be made in writing or e-mail and include specifications regarding format and content with a not-to-exceed due date for receiving the information. The COR may need to schedule one-on-one meetings with individual specialists in order to clarify information.

*Coordination with Forest Service IDT:* Call, e-mail, and meet with the Forest Service frequently between meetings to get feedback, check progress on tasks, and keep everyone informed and involved. CFS shall go through the COR first. COR will relay requests/info to USFS IDT personnel and will inform CFS when they can contact USFS personnel without going through the COR first.

*Quality Assurance/Quality Control:* The Contractor, not the Government, is responsible for management and quality control actions to meet the terms of this contract. The role of the Government is quality assurance to ensure contract standards are met. Records of quality inspections shall be kept and made available to the Government throughout the performance period and for the period after contract completion until final settlement of any claims under this contract. A description of the site specific quality control inspection plan shall be provided within thirty (30) days of contract award. The plan shall include; (1) control procedures for security of Government-provided items such as keys, and lock combinations; (2) location of the inspection documents; (3) corrective or preventive actions that will be taken to meet quality standards; and (4) a customer comments feedback system. The following documents our plan:

- Government-provided items will be delivered to the Project Manager, unless special arrangements have otherwise been made with the COR. In all instances, the location and security of government-provided items will be reported to the Project Manager.
- Quality assurance/quality control will be conducted on a deliverable basis. Standards for deliverables are outlined in this work plan and in Solicitation Appendix A. Inspection of CFS staff and subcontractor deliverables will be the responsibility of the Project Manager, NEPA Specialist, and Resource Leads, as appropriate. Inspection documents will most often consist of review and comment of delivered reports and data sets. These will be stored on the CFS file server in Lacey, Washington.
- Corrective measures to CFS staff performance will be handled by the Project Manager using existing procedures in the CFS Employee Handbook. Corrective measures to subcontractor performance will be handled by mechanisms in our subcontractor agreements. In all cases, we seek to avoid such measures through pro-active management and communication to set clear expectations and promote total quality management—high performing team members in all aspects of our work.
- The primary customer feedback mechanism will consist of the Project Manager’s regular interaction the COR. Through this relationship, we hope an honest and frank assessment of contractor performance is gained so that we meet expectations.

#### NEPA Specialist

The primary expectation set in Solicitation Appendix A for the NEPA Specialist is that they ensure environmental documents prepared by IDT are complete and adhere to NEPA regulations, Colville Forest Plan standards, and all applicable Forest Service regulations and policies. This is the primary role of the NEPA Specialist in our IDT. He will not be taking on any resource analysis duties. His sole focus will be on preparation and review of NEPA documents.

Writer/Editor

The Writer/Editor has several key roles in supporting the project as outlined below based on specifications provided in Solicitation Appendix A.

*Project Documents:* The Writer/Editor will be responsible for editing, compiling and organizing field data, project documents and reports and references sufficient to support the NEPA analysis and decision. All field data, project documents and reports and references shall be submitted to the Forest Service upon request. Field data, project documents and reports and references shall not be released to outside organizations or agencies without written consent from the Forest Service. Delivered documents shall be in the form of paper copies, facsimiles, and/or electronic copies as specified. Electronic word processing documents shall be Microsoft Word. Where multiple copies are indicated, it will be understood these are to be paper copies. Elsewhere where copy media is unspecified by the Forest Service, it will be the option of CFS to provide the materials by either paper copy or electronic copy. For enhanced communication and to minimize time constraints, it is anticipated and desired that many transmittals will be via electronic mail. All EIS documents shall be published to the standards outlined within the Federal Register Drafting Handbook. Mailings shall be by United Parcel Service (UPS) or Federal Express (Fed Ex).

*Project Record:* The Writer/Editor will be responsible for maintaining a project record that adheres to Pacific Northwest Region 6 standards. The project record shall include all field data, project documents and reports and references. This information shall be used by the responsible official to help evaluate all the relevant issues, concerns and alternatives and make a reasoned decision. The project record is used to defend the decision under the Forest Service's administrative appeal and objection processes and in court if the decision is further challenged. It is essential that the NEPA process for any proposal made by the Forest Service is well documented and organized. Short time frames involved with appeals, objections and litigation necessitate a systematically organized, readily accessible record. CFS shall place all documents generated or used for the development of the EAs, RAR, and BEs/BAs into a concise project record. The project record shall be filed by subject. For example, separate sections may be titled "Meeting Notes", "Wildlife", "Direction and Planning", etc. Documents may occur in all acceptable formats (hard copy paper, compact disk, digital etc.) and may include: papers, published studies, books, reference maps, written and electronic correspondence, final computer runs, etc. The Forest Service will maintain these as part of the project record. CFS shall submit 1 original and 1 exact copy of the original project record in three-ring binders and submit both at the completion of the Contract. Forest Service requires planning records to be able to stand on their own during appeal or litigation challenges. Should CFS have numerous EAs or books that need to go into the planning record, CFS should provide electronic copies

and/or photocopy the portion of the documents used in analyses and photocopy the cover of the documents and Library of Congress page in books. Approval from the Responsible Official or their Delegated Official will be needed for the Project Record.

*Meeting Notes:* CFS shall provide a copy of meeting notes (both internal with Forest Service personnel and external with the members of the public) within 5 working days following each meeting during the lifetime of the project. The notes do not become "official" until the Forest Service has an opportunity to review them. Generally, the review will be 5 days or less from time of receipt. Once "official", the notes shall be placed in the project record. This will be coordinated by the Writer/Editor.

### GIS Analyst

The GIS Analyst has the following key responsibilities outlined in Solicitation Appendix A:

- Maintaining a GIS database compatible with ESRI ArcGIS for the project that is capable of analyzing all relevant data as required by each IDT member.
- Ensuring all GIS files developed for the project are provided back to the Forest Service in a format compatible with ESRI ArcGIS.
- Ensuring all Forest Service provided GIS files are returned to the Forest Service upon completion of the contract.
- All GIS data developed by CFS shall meet Forest Service accuracy standards for geographic data and shall be provided electronically to the Forest Service. Forest Service uses ESRI Arc GIS version 10.

## **Schedule**

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Our schedule for completing NEPA analyses in the North Fork and Middle/South Fork planning areas is outlined, by phase and task, in Figures 3 and 4. Overall, phases and tasks are generally executed in sequential fashion, although there are some parallel processes which we highlight below. Within this workflow, the key critical path for each NEPA analysis is the field data collection season. Our understanding of local conditions indicates that this season is limited to about May through October. Field data collection is necessary for development of Specialist Reports and completion of the draft EA. Therefore, in order to conform to our overall strategy depicted in Figure 2 and produce final NEPA documents within a 15-month timeframe, we must be ready to complete field data collection by the May following initiation of the analysis. This requires development of a Proposed Action and action alternatives as well as development of field data collection and data analysis protocols. This is a project management focus.

Several efficiencies are built in to this overall schedule. One instance is our development of a Proposed Action prior to engaging interested parties for their input. This exercise allows us to become intimately familiar with resource conditions and issues, allowing us to communicate far more effectively and solicit and interpret public input much more meaningfully. Another is that, where possible, we develop draft documents for review by the Forest Service as early as possible. Key instances where we do this are in development of field data collection and data analysis protocols (these constitute the introduction and methods sections of the Specialist reports) and development of selected EA chapters (e.g., Chapter 1 and 2). And, another key efficiency is that as much field data collection as possible for the Middle/South Fork planning area will occur in summer 2014, along with that for the North Fork planning area. This necessitates a Proposed Action for the Middle/South Fork planning area which we will develop draft form in spring 2014. Data collection for any action alternatives would still need to be accomplished in 2015; this can only be completed after collaboration in spring 2015.

In meeting this schedule, we shall account for review time required by Forest Service specialists and by the Responsible Official or their Delegated Official. Generally, document review by Forest Service specialists will be needed prior to submitting documents to the Responsible Official or their Delegated Official for their review and acceptance. Our intent is to work with Forest Service specialists as early as possible in the process such that when the Responsible Official or their Delegated Official receives their version for review, it will largely be vetted by staff thus relieving their review burden. The CFS Project Manager will work with the COR on an on-going basis to schedule Forest Service specialist review such that fully vetted documents are prepared in a timely fashion. Target dates for our submittal of documents to the Responsible Official or their Delegated Official for the North Fork planning area include:

- Proposed Action and Purpose and Need statement – January 17, 2014
- Key Issues and Alternatives Statement – April 18, 2014
- Preliminary effects at individual development points – Various times TBD in August 2014
- Draft EA prior to printing and distribution will submitted in two stages
  - Chapter 1 and Chapter 2 (except comparison of alternatives) – June 20, 2014
  - Entire draft EA prior to printing and distribution – October 17, 2014
- CFS response to comments – December 12, 2014
- If formal consultation is required, the final BEs/Bas – January 16, 2015
- Final Roads Analysis Report – January 16, 2015
- Final EA prior to printing and distribution – January 16, 2015
- The Project Record – January 16, 2015

A similar set of dates will be identified for the Middle/South Fork planning area in Fall 2014.

With the exception of the summer field seasons, this schedule is somewhat adaptable to accommodate project management issues such as Forest Service specialist or IDT availability, bottlenecks associated with acquiring government supplied information, logistical issues in collaborating with many varied interested parties, bottlenecks associated with review of draft documents, addressing the many complexities inherent to this project, added measures to address issues identified during quality control/quality assurance, etc. These issues are inevitable and expected and must be addressed as they occur in order to assure a defensible NEPA analysis. On either side of the summer field season, schedules can slide—to a point—to accommodate such issues. Prior to the field season, there is leeway in our schedule to develop a Proposed Action, collaborate with interested parties, and identify action alternatives. After the field season, there is leeway to complete the analysis process. The CFS Project Manager will work with the COR on an on-going basis to adapt the schedule to these issues.

This schedule is also adaptable to accommodate the possibility that, in order to develop a viable project, it may be necessary to combine the North Fork and Middle/South Fork planning areas. Our intent is to keep them separate; however, our analysis of the North Fork planning area has only started. To a certain extent, this is already accommodated in the schedule via development of a preliminary Proposed Action form the Middle/South Fork planning area in spring 2014. However, were these two planning areas to be combined, the collaborative process would need to be engaged in order fully develop the Proposed Action and action alternatives. This would be needed in order to fully prepare for the summer 2014 field season. As noted above, the schedule is adaptable to accommodate such a change. Key to this decision would be gaining understanding of whether or not a viable project can be developed for the North Fork planning area. This is of immediate importance to our planning process. We expect to gain this understanding in December 2013. During this time, the CFS Project Manager will work with the COR to adapt the schedule should this be necessary.

Overall, schedule status will be an on-going agenda item during bi-monthly meetings with the COR and in regular communications with the IDT. With completion of this work plan, communication of schedule issues has a needed frame of reference.

Phase/Task	2013		2014												2015
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
<b>Phase 1 (North Fork)</b>															
Conduct Forest Service Specialist Interviews															
Request/Compile Available Datasets															
Conduct Desktop Analyses/Technical Memos															
Identify a Proposed Action (IDT)															
Purpose and Need Statement/Proposed Action															
<b>Phase 2 (North Fork)</b>															
Collaborate with Interested Parties															
Identify Issues and Action Alternatives															
Key Issues and Alternative Statement															
<b>Phase 3 (North Fork)</b>															
Field Data Collection/Data Analysis Protocols															
Compile Comprehensive Cover Type Mapping															
Field Data Collection/Data Verification															
Draft and Final Specialist Reports/RAR															
<b>Phase 4 (North Fork)</b>															
Chapter 1, Purpose and Need															
Chapter 1, Issues															
Chapter 1, Alternatives, Issue Indicators															
Chapter 3, Affected Environment/Consequences															
Prepare Draft Environmental Assessment															
Solicit Public Comments															
Prepare Final Environmental Assessment															
Draft and Final BE/Bas															
<b>Phase 1 (Middle/South Fork)</b>															
Conduct Desktop Analyses/Technical Memos															
Identify a Proposed Action (IDT)															

Figure 3: Schedule for completing NEPA analysis in the North Fork and Middle/South Fork planning areas, 2013 to January 2015.

Phase/Task	2014		2015												2016
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
<b>Phase 2 (Middle/South Fork)</b>															
Collaborate with Interested Parties															
Identify Issues and Action Alternatives															
Key Issues and Alternative Statement															
<b>Phase 3 (Middle/South Fork)</b>															
Field Data Collection/Data Verification															
Draft and Final Specialist Reports/RAR															
<b>Phase 4 (Middle/South Fork)</b>															
Chapter 1, Purpose and Need															
Chapter 1, Issues															
Chapter 1, Alternatives, Issue Indicators															
Chapter 3, Affected Environment/Consequences															
Prepare Draft Environmental Assessment															
Solicit Public Comments															
Prepare Final Environmental Assessment															
Draft and Final BE/Bas															

Figure 4: Schedule for completing NEPA analysis in the Middle/South Fork planning area, 2014 to January 2016.