UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

May 7, 2012

Mary Farnsworth, Forest Supervisor
Idaho Panhandle National Forests
Forest Plan Revision
3815 Schreiber Way
Coeur d'Alene, Idaho 83815

Re: EPA Region 10 Review of the Idaho Panhandle National Forests (IPNF) Draft Land Management Plan (LMP) and Draft Environmental Impact Statement (DEIS). EPA Project Number: 02-032-AFS.

Dear Ms. Farnsworth:

Our review of the DEIS was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review considers the expected environmental impacts and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The draft LMP proposes Goals, Desired Conditions, Objectives, Standards and Guidelines for the various revision topics, and allocates land to designated Management Areas on 2.5 million acres of national forest land in north Idaho to guide forest management for the next 10 to 15 years.

We would like to specifically note our recognition, appreciation and support for:

- The IPNFs' efforts in considering and evaluating a great amount of information and input during preparation of the draft LMP/EIS. We recognize that there are many challenges involved in management of national forests, including the complexities associated with the seven primary LMP revision topics (i.e., Access and Recreation, Vegetation, Timber Production, Fire, Terrestrial Wildlife, Watershed and Aquatic Species, and Recommended Wilderness); multiple statutory and regulatory requirements; and mixed land ownership patterns.
- The IPNFs' efforts to involve the public in land management decisions via numerous public and workgroup meetings, open houses, and field trips.
- Retaining management direction from the Inland Native Fish Strategy (INFISH) in all action alternatives. Including continuing use of Riparian Conservation Areas (RCAs) which buffer streams from management activities.
- The proposal in Alternatives B, C, and D to include more specific direction for future management and restoration of RCAs and maintain or improve intact and functioning RCAs (FW-STD-RIP-01); and include restoration components that compensate for project effects to promote a trend toward desired conditions where RCAs are not intact and not functioning at desired condition (FW-STD-RIP-02).

Printed on Recycled Paper

- LMP Table 32. "Summary of the IPNF monitoring program"[1] monitoring for acres or miles of restoration activities accomplished in 303(d) and TMDL 6th code HUCs.
- The Desired Condition for cooperation and coordination with state and federal agencies, tribes and other groups during watershed restoration (FW-DC-AQS-03 and 04). Successful watershed scale restoration requires close coordination between multiple resource programs, watershed councils, adjacent landowners, and other stakeholders and partners.
- The IPNF and Kootenai National Forests completion of the informative *KIPZ Climate Change Report Climate Change Report* (2010), whose findings are incorporated into the EIS.

We commented on the IPNF's prior draft LMP prepared in 2006 under the Forest Service's earlier 2005 Forest Planning Rule, however, that rule was enjoined in a 2008 Court decision which resulted in preparation of this latest draft LMP under the 1982 Forest Planning Rule. In our comments on the 2006 draft LMP we made several recommendations targeted at increasing watershed and water quality and protections. We also provided recommendations to reduce the impact of motorized travel on sensitive resources in the Forest.

Our comments on the 2011 draft LMP are similar in the sense that we provide several recommendations to strengthen watershed and water quality protection on the Forests. Many worthwhile Goals and Desired Conditions are included in the draft LMP to promote protection and/or improvement in environmental and resource conditions for the various resources and revision topics. However, we are concerned that the Objectives, Standards and Guidelines do not include enough detail to ensure that Desired Conditions – especially for watersheds and water quality - would be achieved in a reasonable timeframe. Because of our concern about potential disconnections between Desired Conditions, Objectives, Standards and Guidelines, we are rating the DEIS as EC-2 (Environmental Concerns-Insufficient Information). A copy of EPA's rating criteria is attached.

To address this concern, we recommend that the Forests consider our enclosed additions and revisions for Objectives, Standards and Guidelines. Where the substance of our recommended addition or revision is addressed in other Forest Service directives, we recommend that the final LMP reference, summarize or identify the relevant law, regulation or policy which similarly helps to achieve Desired Conditions. Our enclosed comments also include a recommendation for the final EIS include additional information to support the overall trend analysis for watersheds, water quality and aquatic habitat.

Thank you for this opportunity to comment on the draft LMP and DEIS. If you have questions regarding our comments, please contact me at (206) 553-1601or by electronic mail at reichgott.christine@epa.gov, or you may contact Erik Peterson of my staff. Erik can be reached at (206) 553-6382 or peterson.erik@epa.gov.

Sincerely,

for

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

[1] LMP p. 98

Enclosures:
EPA detailed comments on the Idaho Panhandle National Forests Draft Land Management Plan and Draft Environmental Impact Statement
EPA Rating System for Draft Environmental Impact Statements

Idaho Panhandle National Forests Draft Land Management Plan and Draft Environmental Impact Statement

WATERSHEDS AND AQUATIC SPECIES

Overall Trend Analysis

We are concerned that the DEIS appears to have inconsistent conclusions regarding the alternatives' overall effect on water quality, soil productivity, riparian, and aquatic habitats. The DEIS's "Description of Alternatives" includes a statement that improvements to water quality, soil productivity, riparian and aquatic habitats may be less under Alternative D because of increased active management and reduced opportunities for passive restoration.[2] The DEIS's Table 6, "Comparison of Key Resource Indicators", includes a generally opposite conclusion. Table 6 summarizes the Trend in Watershed Condition conclusion for Alternative D as a "Potentially rapid improvement in overall trend." The Environmental Consequences section of the DEIS generally supports Table 6's conclusion that Alternative D will provide for the most rapid improvement of watershed and aquatic species conditions. The DEIS concludes, for example, that macroinvertebrate assemblage diversity –an indicator of water quality and aquatic habitat conditions – will improve at a "...more rapid rate than Alternative C".[3]

Recommendation for Overall Watershed Trend Analysis

To more sharply contrast the effects of different amounts of active and passive restoration on overall watershed and aquatic species conditions, we recommend that the FEIS include more information on how the Forests' account for short and long-term effects in overall trend analysis for watersheds, riparian and aquatic habitats. We agree with the DEIS that "...more effects to watersheds, soils, riparian, and aquatic resources are generally expected with more intensive timber harvest."[4] Our interest is for more supporting information on how the Forests come to the conclusion that 'more effects' would lead to both 'more rapid' and 'less' improvements to watersheds and aquatic species.

Strengthening Watershed and Aquatic Species Protections

We believe the direction from Objectives, Standards and Guidelines – which provide for measureable results and limitations, requirements and operational practices/procedures for projects and activities over the life of the plan - should promote more direct and timely attainment of Watershed, Aquatic Habitat and Aquatic Species Desired Conditions. We believe our watershed and water quality focus is warranted within the larger context of the plan because we agree with the DEIS's conclusion that, "Although riparian ecosystems cover a relatively small proportion of the Forest, their ecological significance within the landscape exceeds their limited distribution."[5]

To address this concern, we recommend that the Forests consider the following additions and revisions for Objectives, Standards and Guidelines. Where the substance of our recommended addition or revision is addressed in other Forest Service directives, we recommend that the LMP reference, summarize or identify the relevant law, regulation or policy which similarly helps to achieve Desired Conditions.

---

[2] p. 27
[3] p. 182
[4] p. 186
[5] p. 156

Recommendations – Watersheds and Water Quality

Develop a metric for and add FW-OBJ-WTR-03 similar to the following. *Work cooperatively with the State, EPA and local watershed groups to support development of TMDLs and water quality restoration plans.*

Develop a metric for and add FW-OBJ-WTR-04 similar to the following. *Assess and validate listings of impaired waters and prioritize impaired waters on the IPNF for restoration.*

Revise FW-STD-WTR-01 as follows. *Ground-disturbing activities in source water areas (designated special or public water supply watersheds) shall prevent risks and threats to public uses of the water, and be consistent with State source water protection program requirements. Limited short-term effects from activities in source water areas may be acceptable when they support long-term benefits to the RCAs and aquatic resources.*

Add FW-STD-WTR-03 as follows. *Plan, design and implement new projects and activities in watersheds where there are 303(d)-listed waters to meet approved Total Maximum Daily Loads (TMDLs) for pollutant contributions to 303(d) listed waterbodies, and thereby promote improved watershed conditions and water quality. All 303(d) listed waters may not be fully restored during the planning period, but impaired waters should be prioritized for restoration. Do not cause further degradation of water quality in 303(d)-listed watersheds and waterbodies, unless such degradation is short-term and necessary to promote long-term water quality improvement and attainment of support for beneficial uses.*

Add FW-GDL-WTR-03 *Ground-disturbing activities in watersheds with impaired waterbodies (listed by the State under Section 5 of the Integrated 303(d)/305(b) Report) where an adopted TMDL is available should be carried out in a manner consistent with water quality targets in the approved TMDL and associated water quality restoration plans to promote long-term restoration of full support of beneficial uses.*

Add FW-GDL-WTR-04 *Consider State 303(d) listed water quality impaired waters along with fisheries needs as watershed and water quality restoration needs and monitoring activities are prioritized, and restoration activities planned and conducted in restoration watersheds.*

Add FW-GDL-WTR-05 *Projects and activities are planned, designed and implemented in a manner that protects and maintains project area watershed conditions and water quality for continued support of beneficial uses where such uses are currently supported.*

Recommendations – Riparian

Add FW-GDL-RIP-07 *Wetlands should be flagged and marked on the ground and on maps to facilitate avoidance of disturbance to wetlands.*

Add FW-GDL-RIP-08 *Consider including fisheries biologist and/or hydrologist when laying out treatment units and marking trees within riparian areas along streams to ensure adequate riparian and stream protection.*

Add FW-GDL-RIP-09 *Prohibit storage of fuels and other toxicants within RCAs. Prohibit refueling*

within RCAs unless there are no other alternatives. Refueling sites within an RCA must be approved by the Forest Service and have an approved spill containment plan.

Recommendations - Aquatic Habitat

We are concerned that "FW- OBJ-AQH-02. Macroinvertebrates", appears to allow for temporally and spatially localized degradation of macroinvertebrate communities. The statement "over the life of the plan" implies a temporal averaging approach to meeting biological objectives such that it is acceptable to have periods that do not meet biological criteria as long as there are one or more periods when biological objectives are exceeded during the life of the plan. The draft Objective also implies an allowance for spatial averaging across the planning area. As written, this objective could be met by having one site with a score of 1.0 and another of 0.56. The site with a score of 0.56 would indicate that the ecological conditions at that site have been severely degraded.

To help ensure that aquatic habitat is protected at as many sites and at as many different times as possible, consider revising FW- OBJ-AQH-02 as follows. *Over the life of the plan, the structural and functional diversity of aquatic macroinvertebrate communities of all streams within a planning area is not substantially different than would be expected at sites that remain non-impaired by anthropogenic pollution and/or pollutants. The indication that this objective is being met is that the O/E model scores at all sites monitored on individual water bodies are between 0.80 and 1.20.*

This revision reflects our preference for – respectively - the terms "communities" and "O/E model" over "assemblages" and "RIVPACs".

Add FW-STD-AQH-01 *Plan, design and implement new projects and activities to avoid measurable adverse effects on westslope cutthroat trout, bull trout or interior redband trout and their habitat in Conservation and Restoration Watersheds. Short term negative effects are acceptable if outweighed by long term benefits.*

Add FW-GDL-AQH-01 *New projects and activities should maintain or restore structure, composition, and function of aquatic habitat; including overwintering, spawning, cover, rearing, and feeding habitat.*

Add FW-GDL-AQH-02 *Instream flows and habitat conditions for hydroelectric and other surface water development proposals should maintain or restore riparian resources, favorable channel conditions, fish passage, reproduction, and growth. Coordination will occur with the USFWS, MDFWP, and other federal, state, and local agencies. During re-licensing of hydroelectric projects, provide written and timely license conditions to the Federal Energy Regulatory Commission (FERC, that require fish passage and flows and habitat conditions that maintain/restore riparian resources and channel integrity. Coordinate re-licensing projects with the appropriate state agencies.*

Recommendations - Aquatic Species

Add FW-GDL-AQS-03 *Evaluate the risks of aquatic nuisance /exotic species introduction as part of project analysis.*

Add FW-GDL-AQS-04 *Provide and maintain fish passage at new, replacement, and reconstructed road crossings of existing and potential fish-bearing streams, unless barriers are determined beneficial for native fish and/or sensitive aquatic species conservation.*

ACCESS AND RECREATION

Public recreational demand and access has increased significantly in recent years, and motorized uses and roads in many cases have caused increased damage to aquatic and terrestrial resources. The DEIS acknowledges that roads can have some of the greatest effects to watersheds and aquatic biota, with potential to change the runoff characteristics of watersheds, increase erosion and sediment delivery to streams, and alter channel morphology, and change habitats for fish and amphibians (DEIS page 136). Roads also often fragment wildlife habitat, and may be a cause of death for migrating amphibians.

We are concerned that the proposed Access and Recreation Objectives, Standards and Guidelines generally lack the detail and resource protection commitments for the transportation system to meet the aquatic resource protection conditions in FW-DC-AR-07 in a reasonable timeframe.

Recommendations – Access and Recreation
We recommend strengthening of the Access and Recreation Standards and Guidelines so that there is greater likelihood that the aquatic resource protection conditions in FW-DC-AR-07 may be attained within a shorter timeframe. We recommend that the IPNF consider the following revised and/or additional Access and Recreation Objectives, Standards and Guidelines.

Add FW-STD-AR-01 *The transportation system shall be maintained with appropriate road/trail BMPs to minimize road/trail drainage and erosion problems, sediment transport to streams from roads/trails; stable road/trail stream crossings with properly sized culverts and/or bridges that pass desirable native fish at all life stages and promote attainment of desired conditions as road maintenance funding allows.*

Add FW-STD-AR-02 *Forest and District Motor Vehicle Use Maps (MVUMs) should be updated annually or biannually with a clear minimum roads process.*

Improperly designed, located and/or poorly maintained roads can modify natural drainage networks and accelerate erosional processes, resulting in increased stream sedimentation, degradation of aquatic habitats and altered channel morphology. Roads can also fragment wildlife habitat and reduce wildlife security, and promote spread of weeds. Guidelines for road planning, design, operation and maintenance that assure that new roads/trails are protective of watershed conditions, water quality, fisheries and wildlife should help to reduce these adverse effects. Several of these guidelines could also be considered as potential Watershed and Water Quality Guidelines.

Add FW-GDL-AR-02 *New roads and trails should be planned and designed to avoid encroachment into streams and riparian areas, and designed, operated and maintained to minimize impacts on water quality, fish and aquatic life, and hydrologic processes, and promote attainment of desired conditions. Measures to consider for reducing adverse effects of roads/trails on aquatic resources include: Minimize roads and landing locations in RCAs, and carry out watershed analysis to assure roads and landings in RCAs are protective of watersheds:*

- *Avoid constructing roads near streams and riparian areas and on unstable landtypes or landslide or mass failure prone areas, and identify such areas for avoidance prior to road design and construction.*
- *Minimize and avoid sediment transport and delivery from roads to streams with appropriate techniques such as:*

- *stabilize cut and fill slopes*
- *outsloping road surfaces*
- *minimize or avoid disruption of natural hydrologic flow paths by roads, including diversion of streamflow and interception of surface and subsurface flow*
- *routing road drainage away from erosive areas or where they may discharge directly into streams*
- *providing adequate numbers of waterbars, rolling dips and ditch relief culverts to avoid drainage running on or along roads*
- *installing cross-drainage above stream crossings to prevent ditch sediments from entering streams where possible*
- *minimizing road use during spring thaw periods that causes rutting and channeling of snowmelt and runoff, and during wet periods that may erode road surfaces*
- *minimize road construction and reduce road density as much as possible to reduce potential adverse effects to watersheds*
- *consider road effects on stream structure and seasonal and spawning habitats*
- *allow for adequate large woody debris recruitment to streams and riparian buffers near streams*

- *Minimize the number of road stream crossings.*
- *Stream crossings should simulate natural stream grade and substrate as much as possible in fish bearing streams (use bridges, arches and open bottom culverts wherever possible).*
- *Road stream crossings should be assessed to see if they adequately provide for fish passage, flood flows, and bedload and woody debris transport.*
- *Use bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody debris where needed to minimize adverse fisheries effects of road stream crossings.*
- *Properly size culverts to handle flood events, pass bedload and woody debris, and reduce potential for washout.*
- *Replace undersized culverts and adjust culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration.*
- *Construction of stream crossings should occur during periods of low stream flow (usually in late summer or early Fall) and preferably in the dry. Special care should be taken to avoid or minimize impacts to the stream channel and to riparian vegetation during construction. Stream banks disturbed during construction should be revegetated. Operation of equipment within the channels of creeks and rivers only occurs if absolutely necessary and with proper permits and authorizations (e.g., Clean Water Act 404 permits, Montana DEQ 318 authorizations and Montana DFW&P 124 authorizations).*
- *Close, stabilize or obliterate (decommission) roads not needed for future management or recreation that cause resource damages.*
- *Roads scheduled for decommissioning should be analyzed with site-specific analysis to determine decommissioning and/or closure methods (such as stabilization, revegetation, with natural drainage restored) that best protects aquatic and terrestrial resources. Culverts or other crossing structures should be left on closed or decommissioned roads, only when they can be maintained on a regular basis to minimize or prevent the risk of failure and associated resource damage.*
- *Road maintenance (e.g., blading) and handling of road waste material (e.g., slough, rocks) should only be conducted: 1) when the road surface becomes too rough for the designated*

vehicle use; 2) when the surface becomes a safety hazard; or 3) when it is needed to improve road drainage by reducing road surface erosion and sediment delivery from roads to area streams. Avoid blading of road surfaces, including soils and snow, into surface waters or into areas that could result in transport of sediment to surface waters, including wetlands. Avoid routine general blading of ditch lines on insloped roads to maintain vegetative cover for sediment filtering. Where necessary blade only the ditch segments where blockage problems occur.

Add FW-GDL-AR-03 *In Conservation and Restoration watersheds reconstruct road and drainage features that do not meet design criteria or operation and maintenance standards, or are proven less effective than designed for controlling sediment delivery, or retard attainment of desired stream function, or increase sedimentation. Also complete watershed analysis should be conducted prior to constructing roads or landings in RCAs. Transportation planning in Conservation and Restoration watersheds should strive to attain road density favorable to water quality, and healthy populations of native bull trout, westslope cutthroat trout, and interior redband cutthroat trout. Roads and trails not needed for long term management and/or public recreation access, and/or which cannot be maintained within agency budgets or capabilities that are causing resource damages shall be considered for decommissioning.*

Add FW-GDL-AR-04 *Campground facilities and concentrated public recreational use areas should be located away from ecologically sensitive areas and located in areas that are more resilient and can more easily recover from impacts and/or accommodate public use with less impacts.*

Add FW-GDL-AR-05 *Where adjustment measures such as education, use limitations, traffic control devices, increased maintenance, relocation of facilities, and/or specific site closures are not effective in meeting desired conditions for watersheds, riparian areas and aquatic species and avoiding adverse effects on inland native fish and aquatic species of concern, consider eliminating the practice or occupancy.*

FIRE AND AIR QUALITY

The EPA supports the proposed management direction for fire, particularly that public and firefighter safety should be a priority (FW-DC-FIRE-01), and that wildland fire (both prescribed fire and where appropriate, wildfire) should play an increased role in helping to trend vegetation towards the desired conditions while serving other important ecosystem functions (FW-DC-FIRE-03). The EPA supports the national goal to reduce the risk of uncontrolled wildfire in wildland-urban interface areas, and recognizes that judicious and well planned use of prescribed fire can reduce hazardous fuels and restore fire to forest ecosystems that evolved with fire.

We are pleased that a Desired Condition for Air Quality is included specifying that prescribed burning is planned to meet air quality standards, including areas classified as Class I airsheds and nonattainment areas (FW-DC-AQ-01); and that a Guideline is included stating that the Forest should cooperate with the States in meeting the requirements of the State Implementation Plans (SIPs) and the Smoke Management Plans (FW-GDL-AQ-01). We recognize that adherence to the Montana/Idaho Airshed

Group Operating Guide is the current accepted smoke management plan for the State of Idaho.[6]

Recommendation – Air Quality
We recommend the IPNF consider adding a Guideline referencing the elements of the Interagency Prescribed Fire Planning and Implementation Procedures Guide[7] for inclusion in burn plans.

Add FW-GDL-AQ-02 *Elements of the Interagency Prescribed Fire Planning and Implementation Procedures Guide (July 2008) should be addressed in site-specific prescribed burn plans. The public should be notified of pending prescribed burns.*

Recommendation - Fire
Fire management activities can have adverse effects on water quality and riparian areas. We recommend that the IPNF consider adding the following guidelines to help mitigate potential effects to water quality and riparian areas during fire management activities.

Add FW-GDL-FIRE-01 *Bladed firelines, for prescribed fire and wildfire, should be stabilized with water bars and/or other appropriate techniques to control excessive sedimentation or erosion, and firelines should be rehabilitated to reduce erosion and sediment transport risks following the fire.*

Add FW-GDL-FIRE-03 *Avoid delivery of chemical retardant, foam, or other fire chemicals and petroleum products to surface waters, following appropriate protocols and BMPs, including those contained in or similar to the 2011 Record of Decision for Aerial Application of Fire Retardant.*

Add FW-GDL-FIRE-04 *Locate incident bases, camps, helibases, staging areas, helispots and other centers for incident activities outside of RCAs. If the only suitable location for such activities is within the RCAs, an exemption may be granted following recommendation by a resource advisor.*

TIMBER

Because timber production can adversely affect aquatic resources, we recommend that the IPNF consider some additional Guidelines to provide aquatic resource protection during timber management. These recommendations could also be included as additional Watershed Guidelines.

Add FW-GDL-TBR-02 *Vegetation and/or fuel management prescriptions in RCAs will be for the purpose of restoring, enhancing, or protecting the physical and biological characteristics of the RCA including Riparian Management Objectives. Vegetation and/or fuel treatments, for the purpose of protecting urban interface, private property and other investment, and public safety in RCA's shall be designed so as not to prevent the attainment of desired stream function. Fuelwood cutting and salvage in RCAs is allowed where it will not prevent or retard attainment of watershed, riparian and aquatic habitat and aquatic species desired conditions.*

Add FW-GDL-TBR-03 *Minimize erosion and sediment production and adverse impacts to soils during timber harvest by consideration of measures such as use of existing skid trails wherever possible;*

---

[6] DEIS, p. 268
[7] http://www.nwcg.gov/pms/RxFire/rxfireguide.pdf

restrictions on skidding with tracked machinery in sensitive areas; using slash mats to protect soils; constructing water bars; creating brush sediment traps; adding slash to skid trail surfaces after recontouring and ripping; seeding/planting of forbs, grasses or shrubs to reduce soil erosion and hasten recovery; as well as recontouring, slashing and seeding of temporary roads and log landing areas following use.

NOXIOUS WEEDS

Because we support integrated weed management generally, and, due to persistent uncertainties associated with the safety and effectiveness of herbicides; we recommend you consider including the following noxious weed and herbicide guidelines in the Final Land Management Plan.

Add FW-GDL-VEG-09 *Integrated weed management techniques shall be favored to treat and reduce noxious weed infestations, and new noxious weed invasions shall be contained after discovery within the discovered site.*

Add FW-GDL-VEG-10 *Herbicides, pesticides, and other toxicants and chemicals shall be used in a safe manner in accordance with Federal label instructions and appropriate restrictions that avoid public health and safety problems, and allow protection and maintenance of water quality standards and avoid adverse effects to inland native fish and aquatic species of concern from weed control chemicals.*

GRAZING

We are concerned that no Grazing Guidelines are proposed even though it is known that grazing can have adverse effects on stream and riparian functions and water quality. Erosion, gully formation, incision of natural and created channels, soil compaction, streambank trampling, sedimentation of nearby waters, and overuse of forage often occurs in areas where livestock congregate (e.g., along fence lines, trails, roads, watering areas, and bedding areas).

Recommendations - Grazing

We believe the following Guidelines would promote grazing practices protective of stream and riparian functions and water quality (e.g., manage allotments for grazing frequency, duration, stocking rates, animal distribution, season and timing of forage use). These could either be added as Grazing Guidelines or Watershed/Aquatics Guidelines.

Add FW-GRZ-GDL-01 *Grazing practices shall be protective of riparian functioning and stream bank and channel stability (e.g., limit accessibility of livestock to riparian areas and streams; limit livestock trailing, bedding, watering, salting, streambank trampling in riparian areas; change grazing management where grazing impedes progress toward attainment of watersheds and aquatic species Desired Conditions-manage number and location of pastures, length of grazing seasons, stocking levels, timing of grazing, forage utilization, fencing, etc.). General practices to reduce grazing impacts on streams and riparian areas include:*

- *Locate new livestock handling or management facilities outside of RCAs.*
- *Develop and implement grazing management plans and practices in areas of known or suspected fish spawning to avoid or reduce trampling of redds that may result in adverse impacts to the species.*

- *Actively restore (for example, weed control or reseeding of native vegetation) areas that are severely degraded from over grazing.*
- *Identify specific criteria in allotment management plans for special areas, such as wet meadows, where limiting grazing at certain times of the years or under certain conditions is necessary to protect resources.*
- *Prohibit the use of off-road vehicles for grazing management in areas where they conflict with sensitive wildlife or non-motorized recreation areas and users.*

LANDS AND SPECIAL USES

Please consider the following as potential Guidelines for hydropower or water development:

Add FW-GDL-LND-03 *Require instream flows and habitat conditions for hydroelectric and other surface water development proposals that maintain or restore riparian resources, favorable channel conditions, fish passage, & reproduction and growth. Coordinate this process with the appropriate state agencies. During re-licensing of hydroelectric projects, provide written and timely license conditions to the Federal Energy Regulatory Commission (FERC), that require fish passage and flows and habitat conditions that maintain/restore riparian resources and channel integrity. Coordinate re-licensing projects with the appropriate state agencies.*

Add FW-GDL-LND-04 *Locate new hydroelectric ancillary facilities outside RCAs. For existing ancillary facilities inside the RCA that are essential to proper management, provide recommendations to FERC to assure that the facilities would not prevent attainment of the Riparian Management Objectives and that adverse effects on inland native fish and aquatic species of concern are avoided. Where these desired conditions cannot be met, provide recommendations to FERC that such ancillary facilities should be relocated. Locate, operate, and maintain hydroelectric facilities that must be located in Riparian Habitat Conservation Areas to avoid effects that would retard or prevent attainment of the Riparian Management Objectives and avoid adverse effects on inland native fish and aquatic species of concern.*

MINERALS

We appreciate that the proposed Desired Condition for Minerals identify the need for the land to sustain ecosystems and protect other resources while mineral and energy resources are provided (FW-DC-MIN-01). However, we are often concerned about potential environmental effects associated with exploration, development, operation, closure and reclamation of hard rock mines, particularly with regard to risks of mobilization and transport of heavy metals and other pollutants to surface and ground waters.

We note that FW-DC-MIN-01 only mentions reclamation of abandoned mine sites where human health risks exist. While we agree that mine reclamation to address human health risks should be prioritized, reclamation of abandoned mine sites to correct environmental contamination and degradation to fisheries and wildlife should also be considered and noted in the Desired Condition. We recommend that the IPNF consider the following revision.

Revise FW-DC-MIN-01 *The Forest continues to contribute to the economic strength and demands of the nation by supplying mineral and energy resources while assuring the land's capability to sustain*

ecosystems. Mineral materials are made available based upon public interest, material availability, in-service needs, and protection of other resource values, <u>including consistency with desired conditions for other resources</u>. Geologic features are conserved for their intrinsic values and characteristics. Reclamation of abandoned mine sites <u>to address human health and environmental degradation risks should occur, with reclamation priority given to mine sites with human health risks</u>.

We are concerned that there are no proposed Minerals Guidelines, even though it is known that metal mining has potential to cause environmental degradation. We consider it important to have appropriate Guidelines for minerals development to help assure that minerals development is protective of other resources, particularly water quality and aquatic resources. We are including the following suggestions for your consideration.

<u>Add FW-GDL-MIN-01</u> *Minimize adverse effects of mineral operations on water quality and inland native fish and aquatic species of concern. If a Notice of Intent indicates that a mineral operation would be located in an RCA, consider the effects of the activity on water quality and inland native fish and aquatic species of concern in the determination of significant surface disturbance pursuant to 36 CFR 228.4. For operations in a RCA ensure operators take all practicable measures to maintain, protect, and rehabilitate fish and wildlife habitat which may be affected by the operations. Reclamation bonds are adequate to ensure long-term chemical and physical stability; successful reclamation of the area of operation; and necessary treatment and remediation of mine wastes over the long-term.*

<u>Add FW-GDL-MIN-02</u> *Locate and design mine facilities and mine water management to minimize surface disturbances, control water runoff, minimize erosion and sedimentation, protect hydrologic function and integrity, and prevent the release of acid or toxic or hazardous materials to surface or ground waters.*

<u>Add FW-GDL-MIN-03</u> *Locate structures, support facilities, and roads outside RCAs. Where no alternative to locating mine facilities in RCAs exists, locate and construct the facilities in ways that avoid impacts to RCAs and streams and adverse effects on inland native fish and aquatic species of concern. Where no alternative to road construction exists, keep roads to the minimum necessary for the approved mineral activity. Close, obliterate, and revegetate roads no longer required for mineral or land management activities.*

<u>Add FW-GDL-MIN-04</u> *Prohibit solid and sanitary waste facilities in RCAs. If no alternative to locating mine waste (waste rock, spent ore, tailings) facilities in RCAs exists, and releases can be prevented and stability can be ensured, then:*

a. Analyze the waste material using the best conventional sampling methods and analytic techniques to determine its chemical and physical stability characteristics.

b. Locate and design the waste facilities using the best conventional techniques to ensure mass stability and prevent the release of acid or toxic materials. If the best conventional technology is not sufficient to prevent such releases and ensure stability over the long term, prohibit such facilities in RCAs.

c. Monitor waste and waste facilities to confirm predictions of chemical and physical stability, and make adjustments to operations as needed to avoid adverse effects on inland native fish and aquatic species of concern.

d. Reclaim and monitor waste facilities to assure chemical and physical stability and revegetation

to avoid adverse effects on inland native fish and aquatic species of concern.

e. *Require reclamation bonds adequate to ensure long-term chemical and physical stability, water treatment, and successful revegetation of mine waste facilities.*

Add FW-GDL-MIN-05 *Permit sand and gravel mining and extraction within RCAs only if no alternatives exist, and if the action(s) would not retard or prevent attainment of watershed, riparian and aquatic habitat and aquatic species desired conditions, and would avoid adverse effects on inland native fish and aquatic species of concern.*

Add FW-GDL-MIN-06 *Develop inspection, monitoring, and reporting requirements for mineral activities. Evaluate and apply the results of inspection and monitoring to modify mineral plans, leases, or permits as needed to eliminate impacts that prevent attainment of watershed, riparian and aquatic habitat and aquatic species desired conditions, and avoid adverse effects on inland native fish and sensitive aquatic species.*

Add FW-GDL-MIN-07 *Active and abandoned mines on the Forest that pose risks of environmental degradation, particularly acid mine drainage or mobilization and transport of toxic or hazardous materials shall be identified and prioritized for restoration.*

MONITORING

We believe monitoring, such as the monitoring summarized in draft LMP Table 32, and adaptive management is an integral part of land management. It is only through monitoring of actual effects that occur that the IPNF will be able to determine whether: 1) Desired Conditions are being met; 2) assumptions and indicators used in developing and implementing the plan are valid; 3) estimates or predictions made in the analysis, including cumulative effects, are accurate; and 4) if mitigation is effective or should be increased or decreased or otherwise adjusted to be meet desired conditions.

We are often concerned that monitoring is constrained by limited funding, and that operating budgets for monitoring and evaluation programs could be reduced below those needed for adequate monitoring and evaluation. We recommend that the LMP and monitoring guide should discuss how future budget decisions may affect monitoring and evaluation. We support linking the approval of projects tiered to the LMP to availability of funding for conducting needed monitoring and evaluation. We encourage IPNF to make a strong, explicit commitment to funding monitoring activities, especially watershed/water quality monitoring, such as that in the Forest Service Pacific Northwest Region's Forest Monitoring and Evaluation Guide in which the Regional Forester stated, "All programs and projects should contain appropriate levels of monitoring funds in their costs - or they should not be undertaken." (USDA FS 1993).

We generally recommend that aquatic monitoring be included in projects, using aquatic monitoring parameters such as channel cross-sections, bank stability, width/depth ratios, riffle stability index, pools, large woody debris, fine sediment, pebble counts, macroinvertebrates, etc,. Biological monitoring can be particularly helpful, since monitoring of the aquatic biological community integrates the effects of pollutant stressors over time and, thus, provides a more holistic measure of impacts than grab samples.

MANAGEMENT AREA DIRECTION

Recommended Wilderness

We generally support additions to the National Wilderness Preservation System since wilderness areas and roadless areas often provide population strongholds and key refugia for listed or proposed species and narrow endemic populations due to their more natural undisturbed character. The EPA supports protection of the pristine character and integrity of remaining minimally disturbed roadless and wilderness study areas to prevent further fragmentation and degradation of wildlife habitat, including habitat for threatened species such as the bull trout, grizzly bear and lynx as well as other species such as mountain goat and wolverine, and to maintain or restore solitude and primitive recreation characteristics in such areas. Many areas are threatened by increasing levels of motorized recreation and resource development.

U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.