Rick Patten/R1/USDAFS
01/27/2006 10:30

To Jodi Kramer/R1/USDAFS@FSNOTES
cc
bcc
Subject Fw: EPA Comments on KIPZ plans

Here are the individual comments Steve Potts sent to (I assume Tom R) in the format he had asked for them. These may have been translated into the summaries that were put together, but it was hard in those to identify the source.

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----- Forwarded by Rick Patten/R1/USDAFS on 01/27/2006 10:28 -----

Potts.Stephen@epamail.epa.gov
01/27/2006 09:34

To rpatten@fs.fed.us
cc
Subject EPA Comments on KIPZ plans

Rick,

I forgot to attach the EPA comments on the internal KIPZ plans to my message on beneficial uses (see attached).

(See attached file: IPNF-preliminaryFP-comment.doc)(See attached file: KNF-preliminaryFP-comment.doc)

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IPNF-preliminaryFP-comment.doc


KNF-preliminaryFP-comment.doc

Preliminary EPA Comments on Internal Review Draft of Proposed Land Management Plan for Idaho Panhandle National Forest (Dec. 2005)

Chap. #	Page, Line #	Comments	Suggested Change (*Italics* show suggested language change)
		Obviously a Table of Contents would be helpful to quickly understand how the Plan is organized and where to look for information.	Include Table of Contents in next edition.
Pref-ace	page 1-VI, line 245	The preface includes a brief explanation of each element of the Forest Plan, but all it says about the Monitoring Strategy is that it is "being developed." It would be helpful to public understanding to provide some brief explanation of what the Monitoring Strategy will be, and how it will be used to guide monitoring (e.g., what are the distinctions between the Monitoring Strategy and the discussion of monitoring in the Chapter 2 Strategy of the Forest Plan and in the Evaluation Report?).	Provide brief discussion of the Monitoring Strategy that explains why it is a separate document rather than a component of Forest Plan Chapter 2 Strategies.
Pref-ace	page1-VI, line 250	The public may want to know more about what an EMS is, beyond that it is "being developed" (since EMS is listed among the elements of the Forest Plan Set of Documents).	A brief description of an EMS is included on page 1-III, lines 118 to 122. It is suggested that this description be included here where the public sees EMS in bold print.
Pref-ace	page 1-IX, line 376 to 379	Is the list of Tribes, Congressionals and other elected officials, other agencies, and interest groups that you have met with or briefed so long that it could not be included in the Forest Plan? Why make the public have to make a special request to get such information?	Identify Tribes, Congressionals and other elected officials, other agencies, and interest groups that you have met with or briefed in the Forest Plan.
Pref-ace	page 1-XI, line 440	A year of enactment is given for each law, except the Healthy Forest Restoration Act.	Healthy Forest Restoration Act *of 2003*

Preface	pages 1-XI and 1-XII, lines 466 to 492	The INFISH discussion does not clearly explain or identify where key riparian & aquatic conservation components in INFISH will reside in the new Plan Set of Documents (e.g., RHCA requirements, riparian buffers, activity limitations, etc.). While we understand that the replacement aquatic strategy may look somewhat different than INFISH, we believe that the replacement aquatic strategy needs to include the primary INFISH aquatic conservation components. Key aquatic strategy components include: 1) designated sensitive areas (e.g., riparian, wetland, landslide prone, ground water recharge, lakes, springs, etc.,) that provide functions and values and support aquatic & terrestrial species; 2) core areas that serve as strongholds, refugia, or key watersheds for at-risk and listed aquatic species or protect public water supplies; 3) clear objectives for managing designated sensitive areas and core areas to conserve their functions & values; 4) a restoration strategy to ensure that legacy issues are addressed; 5) specific management measures for sensitive and core areas that ensure future activities (grazing, roads, timber harvest, salvage, OHV use, etc.) do not impair functions & values; and 6) watershed assessment and aquatic monitoring provisions that will trigger adaptive management and/or demonstrate when objectives and desired conditions are met.	Improve this discussion to explain where Key INFISH riparian & aquatic conservation components will be incorporated into new Plan Set of Documents.
		Line 480 says the riparian strategy described above addresses both ecosystem diversity and species diversity for aquatic species, but the single paragraph riparian strategy "described above"does not appear comprehensive enough to show how ecosystem diversity and species diversity for aquatic species addressed.	Make riparian strategy "described above" comprehensive enough to show how ecosystem diversity and species diversity for aquatic species addressed. Or delete "described above" from line 480).
		It is also stated that some inapplicable direction has been dropped (line 473). It is not clear what portions of INFISH have been dropped.	It would also be helpful to summarize what has been added and dropped from INFISH if that is possible.
		We also suggest that riparian issues and concerns include water quality and public water supply, and that all terrestrial species be considered as a riparian issue rather than just vertebrate species since many terrestrial invertebrate species are important to aquatic and terrestrial food webs, pollination, decomposition, and other ecosystem functions.	Revise starting on line 467: "These issues include *water quality, public water supply,* aquatic species, *riparian-associated terrestrial species,* riparian botanical species, and threatened and endangered fish species."

1	page 1-17, lines 586 to 616	The distinctive roles and contributions of the IPNF fails to identify the importance of watershed management. Management of watersheds to produce good water quality is an important role of national forests. The IPNF includes several municipal watersheds providing public water supplies that are classified for public drinking water under Idaho Water Quality Standards (e.g., Check with Idaho DEQ on specific municipal watersheds in Idaho). It is important that municipal water supply watersheds on IPNF lands be managed to protect public water supplies. In addition there are surface waters within the IPNF that are listed as water quality impaired by the State of Idaho under Section 303(d) of the Clean Water Act. It will be important to manage watersheds in these listed drainages in a manner that promotes restoration of these waters.	Add: *-Providing well managed healthy watersheds producing clean water supporting beneficial uses, including public water supply.*
1	pages 1-17 and 1-18, lines 617 to 639	The Management Challenges fails to identify a need a manage watersheds to protect public water supplies, and to promote recovery of surface waters listed as water quality impaired by the State of Idaho under the Clean Water Act.	Add: *-A need to a manage watersheds to protect public water supplies, and promote recovery of water quality impaired waters listed by the State of Idaho under Section 303(d) of the Clean Water Act.*
1	page 1-22, lines 819-820	There is no discussion of fragmentation of wildlife habitat or wildlife connectivity issues in the discussion of Desired Condition for Access and Recreation. Although the reader is advised to see the Wildlife Desired Condition for more information on wildlife habitat (line 819). We suggest that habitat fragmentation from roads be specifically mentioned in the discussion of Desired Condition for Access and Recreation, since that is such an important issue for road access.	*"See the Wildlife Desired Condition section for more information on wildlife habitat and habitat connectivity, linkages and security issues associated with road access."*
1	page 1-23, line 852 to 855	Nonessential roads is mentioned here, but while listed in the Glossary is not yet defined in the Glossary.	Define nonessential roads in the Glossary (e.g., *Roads not essential for management or public access and/or which contribute to resource damages and cannot be adequately maintained under current budgets.*)
1	page 1-23, lines 852 to 855	Suggest including a monitoring question regarding the need to assess the condition of forest roads and resource impacts from forest roads, and the ability to address resource impacts caused by roads through road maintenance and/or improvements (BMP installation)?	Add questions: *"Have the conditions of forest roads contributing to resource impacts (e.g., erosion, water quality impacts) been determined? Can degraded road conditions be corrected through road maintenance and/or BMP improvements?"*

1	page 1-25, lines 946-947	Suggest indicating that timber salvage ".... to capture as much economic value of the wood as possible" should also include some acknowledgement of the need for resource protection during salvage operations.	Add language as follows: ".... to capture as much economic value of the wood as possible, *consistent with resource protection.*"
1	Page 1-29, 1-30, lines 1146 to 1153	The statements that FAR and NPF watersheds that contain 303(d) listed segments will be restored to properly functioning condition is good, but we suggest adding goal of restoration of full support of beneficial uses. The Clean Water Act focus is on attainment and protection of water quality for support of beneficial uses of water, and it would assist understanding and help avoid confusion if Forest Plans used language consistent with the Clean Water Act. As noted above we also suggest adding a definition for beneficial uses in the Glossary consistent with the beneficial uses in Idaho Water Quality Standards.	"Watershed systems on the IPNF that are determined to be functioning at risk (FAR) and contain source waters or impaired 303(d)-listed stream segments will be restored to properly functioning condition, *and to promote full support of beneficial uses."* "Watershed systems on the IPNF that are determined to be not properly functioning (NPF), *and which contain source waters or impaired 303(d)- listed stream segments* will be restored usually concurrent with other resource restoration activities in the watershed *to promote full support of beneficial uses.* No new impairments or long-term risks to the watersheds processes and functions, water quality, or beneficial uses will be incurred."
1	page 1-29, line 1139	We suggest deleting "State designated," and instead explaining in the definition of beneficial uses in the Glossary that the beneficial uses are those uses designated in Idaho State Water Quality Standards.	Delete "State designated" and include appropriate definition of "beneficial uses" in Glossary.

1	page 1-30, lines 1148 to 1153	It is not clear how 303(d) listed watersheds will be prioritized for restoration should there be budget limitations for restoration. We believe IPNF should work towards restoration of all impaired waters on the Forest where Forest activities have contributed to the water quality impairment. We recommend that the IPNF coordinate with the IDEQ and EPA during their preparation of TMDL source assessments, and where completed TMDLs indicate that restoration work is needed, the IPNF should have a means of planning and prioritizing the restoration work. All watersheds with 303(d) listed waters where Forest activities contribute to the water quality impairment should be considered watersheds with a restoration emphasis. Watershed restoration prioritization criteria and/or a decision tree for determining restoration priorities should be developed, or at a minimum state that IPNF will coordinate with IDEQ and EPA to prioritize and implement restoration work in 303(d)-listed drainages.	Add: *IPNF will coordinate with the Idaho DEQ and EPA to prioritize and implement watershed restoration work where Forest activities have contributed to water quality impairment.*
1	page 1-30, line 1167 & footnote	The footnote says that natural ranges of instream habitat features are described in Volume XX of the Plan Set of Documents. It is not clear which of the Plan Set of Documents this information will be in (e.g., Forest Plan, Evaluation Report, EMS documentation, etc.,), and if this will include RHCA requirements.	Identify more clearly where in the Plan Set of Documents instream habitat features and other key components of the aquatic conservation strategy will be identified.
2	Page 2-3, lines 83 to 86	The only performance measure proposed for road maintenance is identification of miles of road to be fully maintained by objective maintenance level. We suggest a performance measure to assess level of improvement in conditions of forest roads and associated reductions in resource impacts from forest roads?	Add performance measures that show miles of road in need of improved road drainage/road BMPs, and miles of road where road drainage is improved and BMPs are installed.
2	Page 2-3, lines 79 to 82	The performance measures for road access do not appear to include measures that assess how resource concerns from roads (wildlife fragmentation, connectivity or security) or activity conflicts, over-use and unroaded areas or extent of solitude are being addressed. Would it be appropriate to add a performance measure to show land area where wildlife fragmentation impacts are reduced and wildlife security increased by road management changes? Are measures such as land area over 2 miles from any road or land area below a threshold open road density applicable measures for evaluating wildlife fragmentation? [Does miles of road closure or decommissioning measure this?] (Also, see comment below on performance measures for habitat connectivity, relative to page 2-8 of the Plan).	?

2	page 2-6, lines 182 to 199	The performance measures for watersheds indicates that risk factors within the reasonable control of NF management will be removed or mitigated on certain %'s of the Forest's watersheds in different functioning condition categories. First of all, it is not clear what "reasonable" control means. This element of confusion could be eliminated by simply stating that risk factors within the control of NF Management would be removed or mitigated. Also, the definition of risk factors in the glossary says that "these factors are estimated at the broad scale, but actual risk factors often need to be refined and defined though mid (EAWS) and project scale assessments." There is no assurance that adequate and appropriate risk factors will be identified for removal or mitigation, and it is not clear how risk factors may relate to pollutant sources that may be identified in TMDLs and water quality restoration plans that are being prepared by the State and EPA. TMDLs and water quality restoration plans will establish the legal targets for water quality restoration for 303(d) listed waters. It is important that linkage is made between risk factors and pollutant reductions identified in TMDLs (e.g., % sediment load reduction from roads or harvested areas, etc.,). Also, it is not clear how consistency of the percentages of watersheds with risk factors removed and the acres treated annually to restore watersheds will be accomplished in watersheds that include 303(d) listed waters. Perhaps that will be taken care of by Watershed Objective #3 that says elements and controls associated with completed TMDLs and restoration plans will be applied. It should be recognized, however, that Objective #3 could override the percentages and acres of restoration treatment in Objectives #1 and #2 for watersheds of 303(d) listed waters.	Suggest deleting the word "reasonable." Perhaps, this concern can be addressed by simply stating in the glossary definition of risk factors that, "....actual risk factors need to be refined and defined through mid (EAWS) and project scale assessments *as well as TMDLs and water quality restoration plans being prepared by the State and EPA in cooperation with the National Forests."* (Will have to check with EPA TMDL staff on this. (?)
2	page 2-8, lines 245 to 251	The proposed performance measure for habitat connectivity that would identify a certain number of "approach areas" where strategies will be developed over the life of the plan is unclear to me. Is this the best measure for assessing habitat connectivity and reduced wildlife fragmentation from roads? Would other measures such as the miles of road closed, or land area over 2 miles from any road, or land area below a threshold open road density be helpful?	?
2	Page 2-8,	Are the proposed wildlife objectives consistent with the goals and conservation needs in the recently released Idaho Statewide Fish & Wildlife Conservation Strategy? (See http://fishandgame.idaho.gov/cms/tech/CDC/cwcs_table_of_contents.cfm, Note: This document is listed as a source of information in the Wildlife Guidelines on page 3-18, maybe that is enough?)	Check consistency with the State Fish & Wildlife Conservation Strategy.

3	Page 3-12, lines 348 to 352	We also suggest that management practices in drainages of 303(d)-listed waters be consistent with TMDLs in development. Also, it is not clear why the term "where necessary and practical" is included in this statement. When and where can it be determined that pollutant reductions for 303(d)-listed waters are not "necessary and practical?"	"Management practices that have the potential to affect water quality and beneficial uses within a 303(d)-listed watershed that does not have an adopted TMDL, should be designed and implemented *consistent with TMDLs being prepared by the State (consult with IDEQ)* such that water quality does not decline further, and does not further impair the beneficial uses of the water and that there is *an adequate reduction* of the pollutant(s) of concern."
3	Page 3-12, line 354	It is stated that roads and trails that are removed or put in intermittent storage should be rendered "hydrologically neutral." The Glossary definition of "hydrologically neutral" says that this is the condition where natural or inherent slope stability and slope hydrology is essentially the same as the undisturbed slope. To avoid misunderstanding we suggest that the definition of "hydrologically neutral" include clarification that culverts would be removed and natural drainages restored.	Suggest making definition of "hydrologically neutral" clearer. Add: ".... essentially the same as the undisturbed slope *(including removal of culverts and restoration of stable natural drainages)."*
3	Page 3-13, lines 356 to 359	Where there are TMDLs it is stated that management practices should be designed and implemented to result in cumulative net reduction of pollutants, where "necessary and practical," and that further impairments of beneficial uses should be avoided in the short and long term. We believe that management practices should be designed and implemented to promote attainment of pollutant load reductions identified in TMDLs. It is also not clear why the term "where necessary and practical" is included in this statement. [Note: using language that practices be designed to promote attainment of pollutant load reductions in TMDLs provides some flexibility to accommodate circumstances that may limit actual attainment of load reductions, but is not so open ended as to simply allow determination that pollutant load reductions for 303(d)-listed waters are not necessary or practical.]	Suggest: "Management practices that have the potential to affect water quality and beneficial uses within a watershed that has an adopted TMDL,should be designed and implemented *to promote attainment of pollutant load reductions identified in the TMDL.* Further impairments of beneficial uses should be avoided in both the short and long term."

3	Page 3-13, lines 360, 361	Recommend use of the term "source water protection areas" and/or "source waters" rather than "source areas" to be more consistent with the Safe Drinking Water Act and State Source Water Protection Program terminology. Also, it is recommended that definitions for these terms be included in the Glossary (see below). ["Source water protection areas" are areas delineated around sources of drinking water which are mapped by the States for each Federally regulated public water system. "Source water" is untreated water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water. A "Federally regulated public water system" provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year.]	*"Design and implement management activities to protect source waters and source water protection areas from the risks and threats to impairments of public and domestic water supplies"*

3	Page 3-14, lines 407 to 425	The proposed Riparian Road Management Guidelines could be made more comprehensive. Also, did not see road guidelines that addressed issues such as avoiding road construction on steep slopes, in landslide prone areas, etc.,.	** New road construction will be minimized to reduce adverse environmental effects, roads will be located to minimize adverse effects to surface waters and wildlife.* *-Avoid siting or locating roads near streams, riparian areas and wetlands, steep slopes, and erosive areas, and avoid disruption of natural hydrologic flow paths.* *- Avoid constructing roads on unstable landtypes or landslide or mass failure prone areas. Such areas should be identified for avoidance prior to road design and construction.* *- Minimize number of stream crossings, and necessary stream crossings should simulate natural stream grade and substrate as much as possible in fish bearing streams.* *-Culverts will be properly sized to handle flood events, pass bedload and woody debris, and reduce potential for washout, and should be properly aligned with the stream channel and designed and placed to allow for fish migration. Undersized culverts will be replaced and culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration will be adjusted. Bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody...*

			(Continued) *.... debris are recommended to minimize adverse fisheries effects of road stream crossings.* *- Construction of stream crossings should occur during periods of low stream flow (usually in late summer or early Fall), or dewatering of the crossing site should occur. Special care will be taken to avoid or minimize impacts to the stream channel and to riparian vegetation during construction. Stream banks disturbed during construction will 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, any appropriate Idaho permits or authorizations).* ** Design, operate and maintain roads to avoid sediment delivery to surface waters from the road surface and prevent damage to water quality and fisheries,* *- Cut and fill slopes will be stabilized.* *- Adequate road drainage and control of surface erosion will be provided with measures such as: maintaining crowns on road; adequate numbers of waterbars or rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams.*

			(Continued) *- Roadway surfaces will be outsloped to facilitate drainage off the road unless outsloping would increase sediment delivery to surface waters* *- Ditch relief culverts will not be placed where they may discharge onto erodible slopes or directly into streams.* *- Where possible install cross-drainage above stream crossings to prevent ditch sediments from entering streams.* *- Road drainage will be routed away from fills, unstable slopes or erosive areas.* *- Road maintenance (e.g., blading) 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. Where possible do not remove vegetation growing in ditches draining insloped roads. Unpaved roads should not be graded (bladed) in a manner that contributes to road erosion and sediment transport to streams and wetlands. Avoid routine general blading of ditch lines on insloped roads to maintain vegetative cover. Where necessary blade only the ditch segments where blockage problems occur.*

			(Continued) *- Graded material should not be sidecast over the shoulder, and shoulders should not be widened to encroach upon and have adverse effects upon streams, wetlands, and riparian areas adjacent to roads.* *- Snow plowing in a manner that adds sediment to streams and wetlands should be avoided. Snow plowing of roads when temperatures are above freezing should also be avoided to limit development of runoff created road ruts during thaws that increase road erosion (i.e., ruts channel road runoff along roads increasing erosion of the road surface, and sediment delivery from the road). The potential for snow plowing to cause runoff created ruts increases with snow plowing operations later in winter when there may be frequent thaws. Road maintenance staff should be aware of this concern, and limit late winter snow plowing to when it is absolutely necessary.* *- Road use during spring breakup conditions should be avoided or minimized*
3	Page 3-14, line 430	Why would you only "consider" suspending grazing practices if practices are not effective in meeting riparian guidelines, and avoiding adverse effects to native aquatic life and riparian associated species?	Delete the word "consider" and instead say suspend or modify practices. "....*Suspend or modify grazing practices if they are not effective.*"

3	Page 3-15 and 3-16,lines 464 to 468	Runoff and seepage through mine waste rock, spent ore, tailings piles or storage areas can all generate pollutant laden water that can contaminate ground water as well as surface water. We recommend specifying avoidance of impacts to ground waters as well as surface waters.	".... If no alternative to locating mine waste facilities in RCAs exists, and releases can be prevented and stability can be ensured, then locate and construct the facilities in ways that avoid impacts to RCAs *and surface and ground waters*, and...."
3	page 3-16, lines 508 to 511	We suggest including "water quality supporting beneficial uses" among the goals of watershed restoration projects. The Clean Water Act focus is on attainment and protection of water quality for support of beneficial uses of water, and it would assist understanding and help avoid confusion if Forest Plans used language consistent with the Clean Water Act.	"Design and implement watershed restoration projects in a manner that promotes the long-term ecological integrity of native aquatic and riparian associated species, and contributes to attainment of desired stream habitat features *and water quality supporting beneficial uses*."
3	Page 3-16, line 512	For Other Sources of Design Criteria, we note that water quality restoration plans being developed by the IDEQ and/or EPA in association with TMDLs for 303(d) listed streams may provide guidance or design criteria for watershed restoration projects. Suggest contacting IDEQ or EPA to determine status of TMDLs and Water Quality Restoration Plans for restoration projects within drainages of 303(d) listed waters. FYI there are also numerous EPA watershed restoration guidance documents (search for watershed restoration or management on EPA website http://www.epa.gov)	*"Consult with the IDEQ and/or EPA in regard to watershed restoration guidance for projects in drainages of 303(d) listed waters."*
3	page 3-17, lines 532 to 535	A literal read of this guideline appears to suggest that mechanical operations need only avoid or reduce potential detrimental impacts when slopes are greater than 35-40%.	*"Design and implement mechanical operations to avoid or reduce potential detrimental impacts to long-term soil productivity (as determined by site-specific analysis), using techniques such as operations on snow, frozen ground, or slash mats, etc., and limit mechanical operations to slopes less than 35%."*

3	Page 3-21, lines 667 to 676	We suggest including the Interim Air Quality Policy on Wildland and Prescribed Fires among the Other Sources of Design Criteria for air. A copy of the Interim Air Quality Policy can be found at: http://www.epa.gov/ttn/oarpg/t1/memoranda/firefnl.pdf , and a fact sheet can be found at: www.epa.gov/ttn/oarpg/t1/fact_sheets/firefl.pdf . EPA air quality guidance can be found at www.epa.gov/ttn/oarpg/t1pgm.html . You may also want to display the website for the Montana/Idaho State Airshed Group, http://www.smokemu.org .	See comment.
Glossary	Page G-2	Define Beneficial Uses. (see http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/standards.cfm or http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/beneficial_uses.cfm)	*"Beneficial uses are the uses of water such as public water supply, agriculture, industry, recreation, support of fish and aquatic life, wildlife, etc., that are designated in State Water Quality Standards (See IDAPA 58.01.02, Section 100)."*
Glossary	Page G-12	Suggest adding to definition of "Hydrologically Neutral" to clarify that it is a condition that includes removal of culverts and restoration of stable natural drainages.	"A site-scale condition of a land slope or restored facility where the natural or inherent slope stability and slope hydrology function is essentially the same as the undisturbed slope *(including removal of culverts and restoration of stable natural drainages)."*
Glossary	Page G-15	Define Nonessential Roads	*Roads that are not essential for management or public access and/or which contribute to resource damages and cannot be adequately maintained under current budgets.*
Glossar	Page G-20	Add language to definition for Risk Factors (See comment above in regard to Page 2-6 of the Plan).	"....actual risk factors need to be refined and defined through mid (EAWS) and project scale assessments *as well as TMDLs and water quality restoration plans being prepared by the State and/or EPA in cooperation with the IPNF."*

Glossary	Page G-22	Add definitions for Source Waters, Source Water Protection Areas, and Federally Regulated Public Water System.	*"Source water protection areas" are areas delineated around sources of drinking water which are mapped by the States for each Federally regulated public water system.* *"Source water" is untreated water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water.* *A "Federally regulated public water system" provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year*
Glossary	Page G-26	Suggest using the Federal definition of Wetlands used by the EPA, US Fish & Wildlife Service, Corps of Engineers, etc., (40 CFR 230.3(u) as well as other CFRs).	*"Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."*

Preliminary EPA Comments on Internal Review Draft of Proposed Land Management Plan for Kootenai National Forest

Chap. #	Page, Line #	Comments	Suggested Change (*Italics* shows suggested language change)
		Obviously a Table of Contents would be helpful to quickly understand how the Plan is organized and where to look for information.	Include Table of Contents in next edition.
Pref-ace	page 1-VI, line 242	The preface includes a brief explanation of each element of the Forest Plan, but all it says about the Monitoring Strategy is that it is "being developed." It would be helpful to public understanding to provide some brief explanation of what the Monitoring Strategy will be, and how it will be used to guide monitoring (e.g., what are the distinctions between the Monitoring Strategy and the discussion of monitoring in the Chapter 2 Strategy of the Forest Plan and in the Evaluation Report?).	Provide brief discussion of the Monitoring Strategy that explains why it is a separate document rather than a component of Forest Plan Chapter 2 Strategies.
Pref-ace	page1-VI, line 247	The public may want to know more about what an EMS is, beyond that it is "being developed" (since EMS is listed among the elements of the Forest Plan Set of Documents).	A brief description of an EMS is included on page 1-III, lines 115 to 119. It is suggested that this description be included here where the public sees EMS in bold print.
Preface	page 1-VIII, lines 316 to 324	The discussion of Geographic Areas in the Kootenai Plan talks about the geographic areas and meetings held for the IPNF.	Change to KNF.
Pref-ace	page 1-IX, line 360 to 361	Is the list of Tribes, Congressionals and other elected officials, other agencies, and interest groups that you have met with or briefed so long that it could not be included in the Forest Plan? Why make the public have to make a special request to get such information?	Identify Tribes, Congressionals and other elected officials, other agencies, and interest groups that you have met with or briefed in the Forest Plan.
Pref-ace	page 1-XI, line 437	A year of enactment is given for each law, except the Healthy Forest Restoration Act.	Healthy Forest Restoration Act *of 2003*

Preface	page 1-XII, lines 464 to 490	The INFISH discussion does not clearly explain or identify where key riparian & aquatic conservation components in INFISH will reside in the new Plan Set of Documents (e.g., RHCA requirements, riparian buffers, activity limitations, etc.). While we understand that the replacement aquatic strategy may look somewhat different than INFISH, we believe that the replacement aquatic strategy needs to include the primary INFISH aquatic conservation components. Key aquatic strategy components include: 1) designated sensitive areas (e.g., riparian, wetland, landslide prone, ground water recharge, lakes, springs, etc.,) that provide functions and values and support aquatic & terrestrial species; 2) core areas that serve as strongholds, refugia, or key watersheds for at-risk and listed aquatic species or protect public water supplies; 3) clear objectives for managing designated sensitive areas and core areas to conserve their functions & values; 4) a restoration strategy to ensure that legacy issues are addressed; 5) specific management measures for sensitive and core areas that ensure future activities (grazing, roads, timber harvest, salvage, OHV use, etc.) do not impair functions & values; and 6) watershed assessment and aquatic monitoring provisions that will trigger adaptive management and/or demonstrate when objectives and desired conditions are met.	Improve this discussion to explain where Key INFISH riparian & aquatic conservation components will be incorporated into new Plan Set of Documents.
		Line 478 says the riparian strategy "described above" addresses both ecosystem diversity and species diversity for aquatic species, but the single paragraph riparian strategy "as described above" is not comprehensive enough to show that both ecosystem diversity and species diversity for aquatic species are addressed.	Make riparian strategy "described above" comprehensive enough to show how ecosystem diversity and species diversity for aquatic species addressed. Or delete "described above" from line 478).
		It is also stated that some inapplicable direction has been dropped (line 471). It is not clear what portions of INFISH have been dropped.	It would be helpful to summarize what has been added and dropped from INFISH if that is possible.
		Suggest that riparian issues and concerns include water quality and public water supply, and that all terrestrial species be considered as a riparian issue rather than just vertebrate species since many terrestrial invertebrate species are important to aquatic and terrestrial food webs, pollination, decomposition, and other ecosystem functions.	Revise starting on line 465: "These issues include *water quality, public water supply,* aquatic species, *riparian-associated terrestrial species,* riparian botanical species, and threatened and endangered fish species."

1	page 1-17, lines 570 to 598	The distinctive roles and contributions of the KNF fails to identify the importance of watershed management. Management of watersheds to produce good water quality is an important role of national forests. The KNF includes several municipal watersheds providing public water supplies that are classified AA-1" under Montana Water Quality Standards (e.g. , Flower Creek drainage for Libby water supply; Deep Creek drainage for Fortine water supply; Pilgrim Creek drainage for Noxon water supply). It is important that municipal water supply watersheds on KNF lands be managed to protect public water supplies. In addition there are surface waters within the KNF that are listed as water quality impaired by the State of Montana under Section 303(d) of the Clean Water Act. It will be important to manage watersheds in these listed drainages in a manner that promotes restoration of these waters.	Add: *-Providing well managed healthy watersheds producing clean water supporting beneficial uses, including public water supply.*
1	pages 1-17 and 1-18, lines 599 to 621	The Management Challenges fails to identify a need a manage watersheds to protect public water supplies, and to promote recovery of surface waters listed as water quality impaired by the State of Montana under the Clean Water Act.	Add: *-A need to a manage watersheds to protect public water supplies, and promote recovery of water quality impaired waters listed by the State of Montana under Section 303(d) of the Clean Water Act.*
1	Page 1-19, lines 652, 653	Mentions the Idaho Panhandle National Forest instead of the Kootenai National Forest.	Kootenai National Forest
1	Page 1-23, lines 802-803	There is no discussion of fragmentation of wildlife habitat or wildlife connectivity issues in the discussion of Desired Condition for Access and Recreation. Although the reader is advised to see the Wildlife Desired Condition for more information on wildlife habitat (line 801). We suggest that habitat fragmentation from roads be specifically mentioned in the discussion of Desired Condition for Access and Recreation, since that is such an important issue for road access.	*"See the Wildlife Desired Condition section for more information on wildlife habitat and habitat connectivity, linkages and security issues associated with road access."*
1	page 1-24, line 834	Nonessential roads is mentioned here, but while listed in the Glossary is not yet defined in the Glossary.	Define nonessential roads in the Glossary (e.g., *Roads not essential for management or public access and/or which contribute to resource damages and cannot be adequately maintained under current budgets.*)

1	page 1-24, lines 843 to 852	Suggest including a monitoring question regarding the need to assess the condition of forest roads and resource impacts from forest roads, and the ability to address resource impacts caused by roads through road maintenance and/or improvements (BMP installation)?	Add questions: *"Have the conditions of forest roads contributing to resource impacts (e.g., erosion, water quality impacts) been determined? Can degraded road conditions be corrected through road maintenance and/or BMP improvements?"*
1	page 1-28, lines 917-918	Suggest indicating that timber salvage ".... to capture as much economic value of the wood as possible" should also include some acknowledgement of the need for resource protection during salvage operations.	Add language as follows: ".... to capture as much economic value of the wood as possible, *consistent with resource protection.*"
1	Page 1-31, line 1112,	Will the public know what is meant by delisting impaired water bodies? We suggest a statement that better identifies what "delisting" is, and acknowledge an emphasis on restoration of impaired waters to accomplish delisting. Also, it is not clear how 303(d) listed watersheds will be prioritized for restoration should there be budget limitations for restoration. We believe the KNF should work towards restoration of all impaired waters on the Forest where Forest activities have contributed to the water quality impairment. We recommend that the KNF coordinate with the MDEQ and EPA during their preparation of TMDL source assessments, and where completed TMDLs indicate that restoration work is needed, the KNF should have a means of planning and prioritizing the restoration work. We suggest that all watersheds with 303(d) listed waters where Forest activities contribute to the water quality impairment be considered watersheds with a restoration emphasis, and that watershed restoration prioritization criteria and/or a decision tree for determining restoration priorities should be developed, or at a minimum state that KNF will coordinate with MDEQ and EPA to prioritize and implement restoration work in 303(d)-listed drainages.	Suggest: *KNF will coordinate with the MDEQ and EPA to prioritize and implement watershed restoration work where Forest activities have contributed to water quality impairment (303(d) listing), and/or otherwise work with MDEQ and EPA to delist impaired waters.*

1	Page 1-31, lines 1110 - 1111	It is stated that instream flows will provide for channel maintenance, aquatic habitat, and existing beneficial uses. The IPNF Plan states that "favorable conditions of water flow will occur in watersheds, streams, lakes, springs, wetlands, and groundwater aquifers on NFS lands to fully support State-designated beneficial uses, as well as native aquatic species and their habitat." We very much prefer the language used in the IPNF Plan, since it is more comprehensive, addressing springs, wetlands, and ground water, as well noting the need to fully support State designated beneficial uses. Although we suggest deleting "State designated", and instead explaining in the definition of beneficial uses in the Glossary that the beneficial uses are those designated in State Water Quality Standards (in Montana, ARM 17.30.621 through 17.30.629).	*"Favorable conditions of water flow will occur in watersheds, streams, lakes, springs, wetlands, and groundwater aquifers on NFS lands to fully support beneficial uses, as well as native aquatic species and their habitat."*
1	Page 1-31, lines 1114, 1115	The statement that watershed and aquatic habitat restoration and improvement will be emphasized in low and moderate watershed integrity areas is good, but we believe it is appropriate to also include in a statement of desired watershed conditions a goal of fully supporting beneficial uses. The Clean Water Act focus is on attainment and protection of water quality for support of beneficial uses of water, and it would assist understanding and help avoid confusion if Forest Plans used language consistent with the Clean Water Act. As noted above we also suggest adding a definition for beneficial uses in the Glossary consistent with the beneficial uses in Montana Water Quality Standards (ARM 17.30.621 through 17.30.629).	Add: "Watershed and aquatic habitat restoration and improvement will be emphasized in Low and Moderate Watershed-Integrity areas *to promote restoration of full support of beneficial uses.*"
1	Page 1-31, line 1129 & footnote	The footnote says that natural ranges of instream habitat features are described in Volume XX of the Plan Set of Documents. It is not clear which of the Plan Set of Documents this information will be in (e.g., Forest Plan, Evaluation Report, EMS documentation, etc.,), and if this will include RHCA requirements.	Identify more clearly where in the Plan Set of Documents instream habitat features and other key components of the aquatic conservation strategy will be identified.
1	Page 1-50, line 1701	In the discussion of desired conditions in the Clark Geographic Areas, is there a need to include a statement that water quality will be protected during mining in the Rock Creek drainage (i.e., Rock Creek Mine)?	For example, *"Water quality will be protected and maintained during mining exploration and development activities in the Rock Creek drainage."*

1	Page 1-66, line 1994	In the discussion of desired conditions in the Libby Geographic Areas is there a need to include a statement that water quality will be protected during mining in the Big Cherry and Libby Creek drainages (i.e., Montanore Mine)?	For example, *"Water quality will be protected and maintained during mining exploration and development activities in the Big Cherry and Libby Creek drainage."*
2	Page 2-3, lines 82 to 85	The only performance measure proposed for road maintenance is identification of miles of road to be fully maintained by objective maintenance level. We suggest a performance measure to assess level of improvement in conditions of forest roads and associated reductions in resource impacts from forest roads.	Add performance measures that show miles of road in need of improved road drainage/road BMPs, and miles of road where road drainage is improved and BMPs are installed.
2	Page 2-3, lines 78 to 81	The performance measures for road access do not appear to include measures that assess how resource concerns from roads (wildlife fragmentation, connectivity or security) or activity conflicts, over-use and unroaded areas or extent of solitude are being addressed. Would it be appropriate to add a performance measure to show land area where wildlife fragmentation impacts are reduced and wildlife security increased by road management changes? Are measures such as land area over 2 miles from any road or land area below a threshold open road density applicable measures for evaluating wildlife fragmentation? [Does miles of road closure or decommissioning measure this?] (Also, see comment below on performance measures for habitat connectivity, relative to page 2-8 of the Plan).	?

2	Page 2-6, lines 180 to 193	The performance measures for watersheds indicates that risk factors within the reasonable control of NF management will be removed or mitigated on a certain % of Forest's watersheds. First of all, it is not clear what "reasonable" control means. This element of confusion could be eliminated by simply stating that risk factors within the control of NF Management would be removed or mitigated Also, the definition of risk factors in the glossary says that "these factors are estimated at the broad scale, but actual risk factors often need to be refined and defined though mid (EAWS) and project scale assessments." There is no assurance that adequate and appropriate risk factors will be identified for removal or mitigation, and it is not clear how risk factors may relate to pollutant sources that may be identified in TMDLs and water quality restoration plans that are being prepared by the State and EPA. TMDLs and water quality restoration plans will establish the legal targets for water quality restoration for 303(d) listed waters. It is important that linkage is made between risk factors and pollutant reductions identified in TMDLs (e.g., % sediment load reduction from roads or harvested areas, etc.,). Also, it is not clear how consistency of the percentages of watersheds with risk factors removed and the acres treated annually to restore watersheds will be accomplished in watersheds that include 303(d) listed waters. Perhaps that will be taken care of by Watershed Objective #3 that says elements and controls associated with completed TMDLs and restoration plans will be applied. It should be recognized, however, that Objective #3 could override the percentages and acres of restoration treatment in Objectives #1 and #2 for watersheds of 303(d) listed waters.	Suggest deleting the word "reasonable." Perhaps, this concern can be addressed by simply stating in the glossary definition of risk factors that, "....actual risk factors need to be refined and defined through mid (EAWS) and project scale assessments *as well as TMDLs and water quality restoration plans being prepared by the State and EPA in cooperation with the National Forests."* (Will have to check with EPA TMDL staff on this. (?)
2	page 2-8, lines 242 to 248	The proposed performance measure for habitat connectivity that would identify a certain number of "approach areas" where strategies will be developed over the life of the plan is unclear to me. Is this the best measure for assessing habitat connectivity and reduced wildlife fragmentation from roads? Would other measures such as the miles of road closed, or land area over 2 miles from any road, or land area below a threshold open road density be helpful?	?
2	Page 2-10, line 308 to 311	Are the proposed wildlife objectives consistent with the goals and conservation needs in the recently released Montana Statewide Fish & Wildlife Conservation Strategy? (See http://fwp.state.mt.us/wildthings/cfwcs/strategy.html) Note: This document is listed as a source of information in the Wildlife Guidelines on page 3-18, maybe that is enough?)	Check consistency with the State Fish & Wildlife Conservation Strategy.

3	Page 3-1, line 15,	Reference is made to the IPNF rather than the KNF	Kootenai National Forest
3	Page 3-13, line 363	It is stated that roads and trails that are removed or put in intermittent storage should be rendered "hydrologically neutral." The Glossary definition of "hydrologically neutral" says that this is the condition where natural or inherent slope stability and slope hydrology is essentially the same as the undisturbed slope. To avoid misunderstanding we suggest that the definition of "hydrologically neutral" include clarification that culverts would be removed and natural drainages restored.	Add in Glossary: ".... essentially the same as the undisturbed slope *(including removal of culverts and restoration of stable natural drainages).*"
3	Page 3-13, line 365 to 368	Where there are TMDLs it is stated that management practices should be designed and implemented to result in a cumulative net reduction of pollutants, where "necessary and practical," and that further impairments of beneficial uses should be avoided in the short and long term. We believe that management practices should be designed and implemented "to promote attainment of pollutant load reductions identified in TMDLs." It is also not clear why the term "where necessary and practical" is included in this statement. [Note: Using language that practices be designed to promote attainment of pollutant load reductions in TMDLs provides some flexibility to accommodate circumstances that may limit actual attainment of load reductions, but is not so open ended as to simply allow determination that pollutant load reductions for 303(d)-listed waters are not necessary or practical.]	Suggest: "Management practices that have the potential to affect water quality and beneficial uses within a watershed that has an adopted TMDL,should be designed and implemented *to promote attainment of pollutant load reductions identified in the TMDL.* Further impairments of beneficial uses should be avoided in both the short and long term."
3	Page 3-13, lines 369, 370	Recommend use of the term "source water protection areas" and/or "source waters" rather than "source areas" to be more consistent with the Safe Drinking Water Act and State Source Water Protection Program terminology. Also, it is recommended that definitions for these terms be included in the Glossary (see below). ["Source water protection areas" are areas delineated around sources of drinking water which are mapped by the States for each Federally regulated public water system. "Source water" is untreated water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water. A "Federally regulated public water system" provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year.]	*"Design and implement management activities to protect source waters and source water protection areas from the risks and threats to impairments of public and domestic water supplies"*

3	Pages 3-13,3-14, lines 376-403	The proposed Riparian Road Management Guidelines could be made more comprehensive. Also, did not see road guidelines that addressed issues such as avoiding road construction on steep slopes, in landslide prone areas, etc.,.	** New road construction will be minimized to reduce adverse environmental effects, roads will be located to minimize adverse effects to surface waters and wildlife.* *-Avoid siting or locating roads near streams, riparian areas and wetlands, steep slopes, and erosive areas, and avoid disruption of natural hydrologic flow paths.* *- Avoid constructing roads on unstable landtypes or landslide or mass failure prone areas. Such areas should be identified for avoidance prior to road design and construction.* *- Minimize number of stream crossings, and necessary stream crossings should simulate natural stream grade and substrate as much as possible in fish bearing streams.* *-Culverts will be properly sized to handle flood events, pass bedload and woody debris, and reduce potential for washout, and should be properly aligned with the stream channel and designed and placed to allow for fish migration. Undersized culverts will be replaced and culverts which are not properly aligned or which present fish passage problems and/or serve as barriers to fish migration will be adjusted. Bridges or open bottom culverts that simulate stream grade and substrate and that provide adequate capacity for flood flows, bedload and woody…*

			(Continued) *.... debris are recommended to minimize adverse fisheries effects of road stream crossings.* *- Construction of stream crossings should occur during periods of low stream flow (usually in late summer or early Fall), or dewatering of the crossing site should occur. Special care will be taken to avoid or minimize impacts to the stream channel and to riparian vegetation during construction. Stream banks disturbed during construction will 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).* ** Design, operate and maintain roads to avoid sediment delivery to surface waters from the road surface and prevent damage to water quality & fisheries.* *- Cut and fill slopes will be stabilized.* *- Adequate road drainage and control of surface erosion will be provided with measures such as: maintaining crowns on road; adequate numbers of waterbars or rolling dips and ditch relief culverts to promote drainage off roads avoid drainage or along roads and avoid interception and routing sediment to streams.*

			(Continued) *- Roadway surfaces will be outsloped to facilitate drainage off the road unless outsloping would increase sediment delivery to surface waters* *- Ditch relief culverts will not be placed where they may discharge onto erodible slopes or directly into streams.* *- Where possible install cross-drainage above stream crossings to prevent ditch sediments from entering streams.* *- Road drainage will be routed away from fills, unstable slopes or erosive areas.* *- Road maintenance (e.g., blading) 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. Where possible do not remove vegetation growing in ditches draining insloped roads. Unpaved roads should not be graded (bladed) in a manner that contributes to road erosion and sediment transport to streams and wetlands. Avoid routine general blading of ditch lines on insloped roads to maintain vegetative cover. Where necessary blade only the ditch segments where ...*

			(Continued) *".... blockage problems occur.* *- Graded material should not be sidecast over the shoulder, and shoulders should not be widened to encroach upon and have adverse effects upon streams, wetlands, and riparian areas adjacent to roads.* *- Snow plowing in a manner that adds sediment to streams and wetlands should be avoided. Snow plowing of roads when temperatures are above freezing should also be avoided to limit development of runoff created road ruts during thaws that increase road erosion (i.e., ruts channel road runoff along roads increasing erosion of the road surface, and sediment delivery from the road). The potential for snow plowing to cause runoff created ruts increases with snow plowing operations later in winter when there may be frequent thaws. Road maintenance staff should be aware of this concern, and limit late winter snow plowing to when it is absolutely necessary.* *- Road use during spring breakup conditions should be avoided or minimized*
3	Page 3-15, line 439,	Why would you only "consider" suspending grazing if practices are not effective in meeting riparian guidelines and avoiding adverse effects to native aquatic life and riparian associated species?	Delete the word "consider" and instead say suspend or modify practices. "*.... Suspend or modify grazing practices if they are not effective.*"

3	Page 3-15, 3-16, lines 473 to 477	Runoff and seepage through mine waste rock, spent ore, tailings piles or storage areas can all generate pollutant laden water that can contaminate ground water as well as surface water. We recommend specifying avoidance of impacts to ground waters as well as surface waters.	".... If no alternative to locating mine waste facilities in RCAs exists, and releases can be prevented and stability can be ensured, then locate and construct the facilities in ways that avoid impacts to RCAs *and surface and ground waters*, and...."
3	page 3-17, lines 518 to 520	We suggest including "water quality supporting beneficial uses" among the goals of watershed restoration projects. The Clean Water Act focus is on attainment and protection of water quality for support of beneficial uses of water, and it would assist understanding and help avoid confusion if Forest Plans used language consistent with the Clean Water Act.	"Design and implement watershed restoration projects in a manner that promotes the long-term ecological integrity of native aquatic and riparian associated species, and contributes to attainment of desired stream habitat features *and water quality supporting beneficial uses*."
3	Page 3-16, line 521	For Other Sources of Design Criteria, we note that water quality restoration plans being developed by the MDEQ and/or EPA in association with TMDLs for 303(d) listed streams may provide guidance or design criteria for watershed restoration projects. Suggest contacting MDEQ or EPA to determine status of TMDLs and Water Quality Restoration Plans for restoration projects within drainages of 303(d) listed waters. FYI there are also numerous EPA watershed restoration guidance documents (search for watershed restoration or management on EPA website http://www.epa.gov)	*"Consult with the MDEQ and/or EPA in regard to watershed restoration guidance for projects in drainages of 303(d) listed waters."*
3	page 3-17, lines 541-544	A literal read of this guideline appears to suggest that mechanical operations need only avoid or reduce potential detrimental impacts when slopes are greater than 35-40%.	*"Design and implement mechanical operations to avoid or reduce potential detrimental impacts to long-term soil productivity (as determined by site-specific analysis), using techniques such as operations on snow, frozen ground, or slash mats, etc., and limit mechanical operations to slopes less than 35%."*

3	Page 3-20, 3-21, lines 656 to 665	We suggest including the Interim Air Quality Policy on Wildland and Prescribed Fires among the Other Sources of Design Criteria for air. A copy of the Interim Air Quality Policy can be found at: http://www.epa.gov/ttn/oarpg/t1/memoranda/firefnl.pdf , and a fact sheet can be found at: www.epa.gov/ttn/oarpg/t1/fact_sheets/firefl.pdf . EPA air quality guidance can be found at www.epa.gov/ttn/oarpg/t1pgm.html . You may also want to display the website for the Montana/Idaho State Airshed Group, http://www.smokemu.org .	See comment.
Glossary	Page G-2	Define Beneficial Uses. (see http://deq.mt.gov/wqinfo/Standards/Index.asp)	*"Beneficial uses are the uses of water such as public water supply, agriculture, industry, recreation, support of fish and aquatic life, wildlife, etc., that are designated in State Water Quality Standards (ARM 17.30.621 through 17.30.629)."*
Glossary	Page G-12	Suggest adding to definition of "Hydrologically Neutral" to clarify that it is a condition that includes removal of culverts and restoration of stable natural drainages.	"A site-scale condition of a land slope or restored facility where the natural or inherent slope stability and slope hydrology function is essentially the same as the undisturbed slope *(including removal of culverts and restoration of stable natural drainages).*"
Glossary	Page G-15	Define Nonessential Roads	*"Roads that are not essential for management or public access and/or which contribute to resource damages and cannot be adequately maintained under current budgets."*

Glossar	Page G-20	Add language to definition of Risk Factors (See comment above in regard to Page 2-6 of the Plan).	"....actual risk factors need to be refined and defined through mid (EAWS) and project scale assessments *as well as TMDLs and water quality restoration plans being prepared by the State and/or EPA in cooperation with the KNF."*
Glossary	Page G-22	Add definitions for Source Waters, Source Water Protection Areas, and Federally Regulated Public Water System.	*"Source water protection areas" are areas delineated around sources of drinking water which are mapped by the States for each Federally regulated public water system.* *"Source water" is untreated water from streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water.* *A "Federally regulated public water system" provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year*
Glossary	Page G-26	Suggest using the Federal definition of Wetlands used by the EPA, U.S. Fish & Wildlife Service, Corps of Engineers, etc., (40 CFR 230.3(u) as well as other CFRs).	*"Wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."*