2024 Addendum
2016
An Unofficial Guide To
Helping SFLO Alternate Plans Succeed

This Addendum provides some additional Alternate Plan information and suggestions that may help your Alternate Plan application success.

Read it all, but some key points in the revised *Board Manual 21: Guidelines for Alternate Plans* (https://www.dnr.wa.gov/publications/bc_fpb_bmsection21.pdf) **include:**

PART 1. GUIDANCE FOR SMALL FOREST LANDOWNERS:

- Confirms legislative intent *". . . that alternate plans will be available for small forest landowners who harvest smaller areas which have a relatively low impact on aquatic resources."*
- Criteria for regulatory review partially include:
    - "*Whether the overall long-term benefit to the riparian function after proposed management activities outweighs the potential short-term decrease in function."*
    - *"Riparian function to be enhanced through rehabilitation efforts, including aggressive treatments such as replacing decadent hardwood stands, LWD placement or providing openings for desired native species."*
    - *"Management plans to address potential long-term forest health issues or to better position a stand to survive a fire while providing riparian function."*
- Regulatory reviewers of new alternate plans also legitimately look at *". . . past prescriptions resulting in successful restoration of riparian function."* Editor's note: Although rarely discussed openly I've come to believe the regulators perception ("social license") of your long-term commitment to your forest health and riparian functionality are far more important than all the bureaucratic language in Board Manual 21. Your past successes (or failures) rightly matter to reviewers being asked to deviate from the one size fits all

rules! Find ways to demonstrate you just want to do what is best for your forest and streams long term. . . . most regulators will likewise find ways to help you do that within the flexibility intended with Alternate Plans especially for small family forest owners. You and your proposal must rightly pass a DNR professional forester's smell test to get their approval!

Part 2.2 Riparian Function Considerations. Depending on how close to the stream you want to manage you may be able to address some of the functions in your application by simply saying: "My management activities are outside the area of influence." The AP Guidance in Board Manual 21 defines these areas of influence for each function as:

The **functions least limiting** (all less than 75' BFW) for most management activities:

- **Nutrients and Leaf Litter Fall:** *"The area influencing nutrient input from litter fall is the maximum distance that leaf litter could be expected to reach the stream."*
- **Stream Bank Stability:** *"The area influencing stream bank stability usually extends a distance equal to ½ the average crown diameter . . ."*
- **Sediment Filtering:** *"Areas influencing sediment filtering are usually within 30 feet . . ."*

The **functions most limiting** (near 75' BFW + or -) and most likely needing to be more fully addressed in most Alternate Plans are:

- **Stream Shading:** *"The area of influence of shade from trees usually extends for a distance of 75'. . ."*
- **Woody Debris Availability and Recruitment:** "*The area of influence for LWD recruitment may be estimated as the distance equal to 75 percent of the 100-year site-potential tree height of the dominant trees within the riparian area.* ." (see also new science below)

Part 2.4 Restoring Riparian Function in Eastern Washington – Identifying Stands at Imminent Risk from Insects, Disease and Fire. This new section of BM 21 speaks to the risks of loss of RMZ functionality due to multiple forest health issues/risks on the eastside but has some applications to forest health issues on the westside. Most important is the guidance that encourages both the landowners and the regulators to consider preventative measures/prescriptions

to get ahead of problems rather than wait until it's too late. This guidance attempts to find the sweet spot between management for economics vs letting the forest health deteriorate to the point of little to no economic or functional values. I.e. when are both values about to be lost "imminently"?. . . so landowners and regulators can pre-emptively work together to do the right things before it's too late?

MONITORING PLANS: All alternate plans require some sort of credible monitoring plan. If you are just thinning your riparian zone, it's likely as easy as watching for major blowdown that would necessitate replanting some area's. However, if you are converting hardwoods to conifer, or "*replacing decadent hardwoods"* (or conifers?) in the riparian zones that require replanting you must convince DNR that you understand how hard it can be to re-establish trees in riparian zones prone to lots of competition. **Make a strong commitment** to a thorough inspection every year for the first 3-5 years; mechanical or chemical efforts to control competing vegetation; and replanting failures if needed to get minimum stocking free to grow. In my opinion, if you can't honestly commit to such monitoring don't propose an AP to remove/replace decadent stands!

NEW SCIENCE INFORMATION POTENTIALLY AFFECTING FIELD REVIEWS OF YOUR AP PROPOSAL Again, in my opinion, this **AP approval process is more about your social license/smell test** so you should **resist the temptations to get into "science" debates** in the field that are often lose-lose and force people into corners where you or your proposal will likely be the loser. However, **for your own peace of mind/understanding** the information below is relatively new information not part of the Forests and Fish negotiations in 1999.

Bull Trout Overlay: If your AP proposal is within Bull Trout Overlay areas your field reviewers may or may not be aware of the findings from an Adaptive Management CMER study (https://www.dnr.wa.gov/publications/fp_cmer_02_212.pdf). This study of eastside RMZ harvest prescriptions found no statistically significant stream temperature response differences between our Forests and Fish rule prescriptions and the no-touch/"all shade" Bull Trout Overlay requirements. AP approval standards are about relative "effectiveness" of the rules not the rules themselves so the Bull Trout Overlay language should not be a limiting factor in AP approvals, especially considering this in-house study result.

Large Woody Debris Recruitment: Based on BM 21 areas of influence LWD is the only RMZ function influenced significantly by leave trees beyond 75' BFW. Lots of science show the vast majority of functional/Key LWD comes from within 75' BFW (most within 50'). *LWD placement* can expedite/mitigate on-site shortages in Alternate Plans! The FEMAT curves for LWD recruitment have been determined to be much closer to the streams than previously thought (starting on page 483, including graphs below https://www.fs.usda.gov/research/treesearch/56335)

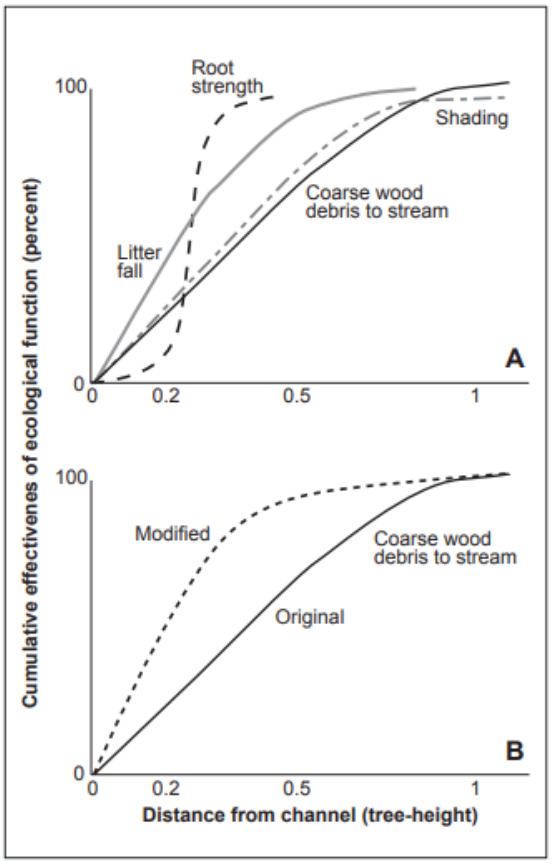


Figure 7-7—(A) Relation of distance from stream channel to cumulative effectiveness of riparian ecological functions (FEMAT 1993: V-27); (B) modified effectiveness curve for wood delivery to streams as a function of distance from the stream channel. The original curve was changed based on scientific literature developed since the original curve was portrayed in FEMAT (1993). Source: Spies et al. 2013.

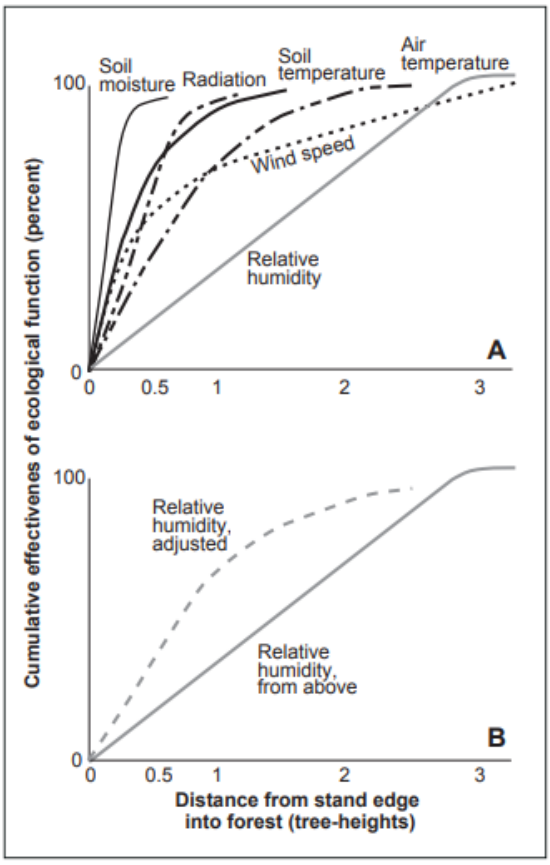
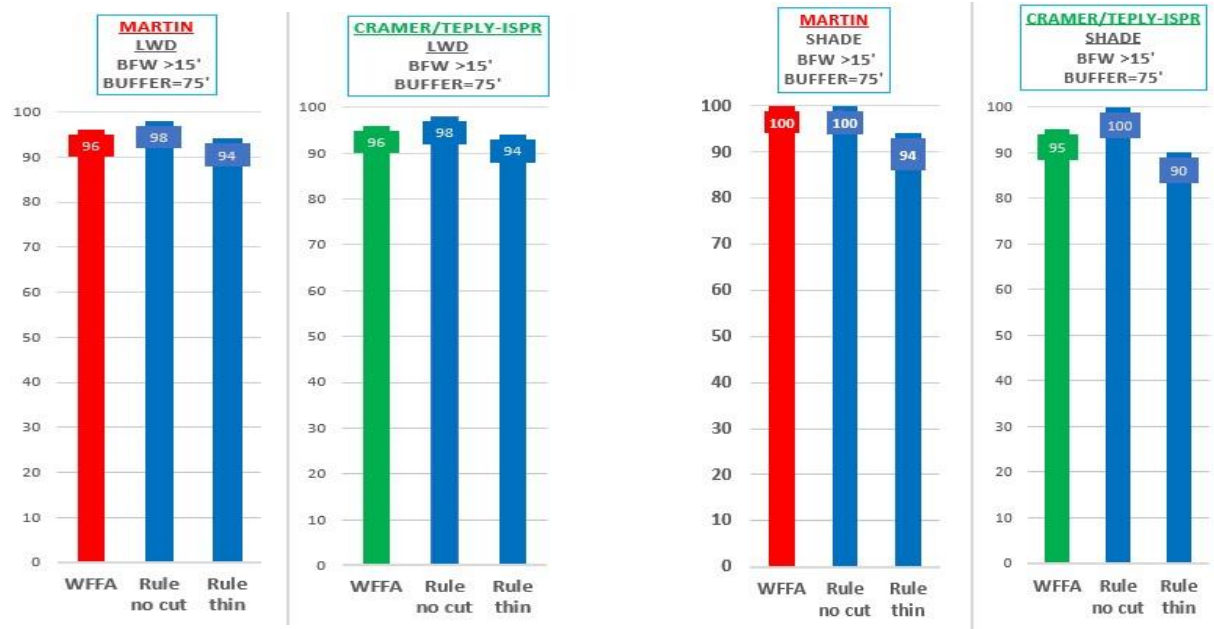


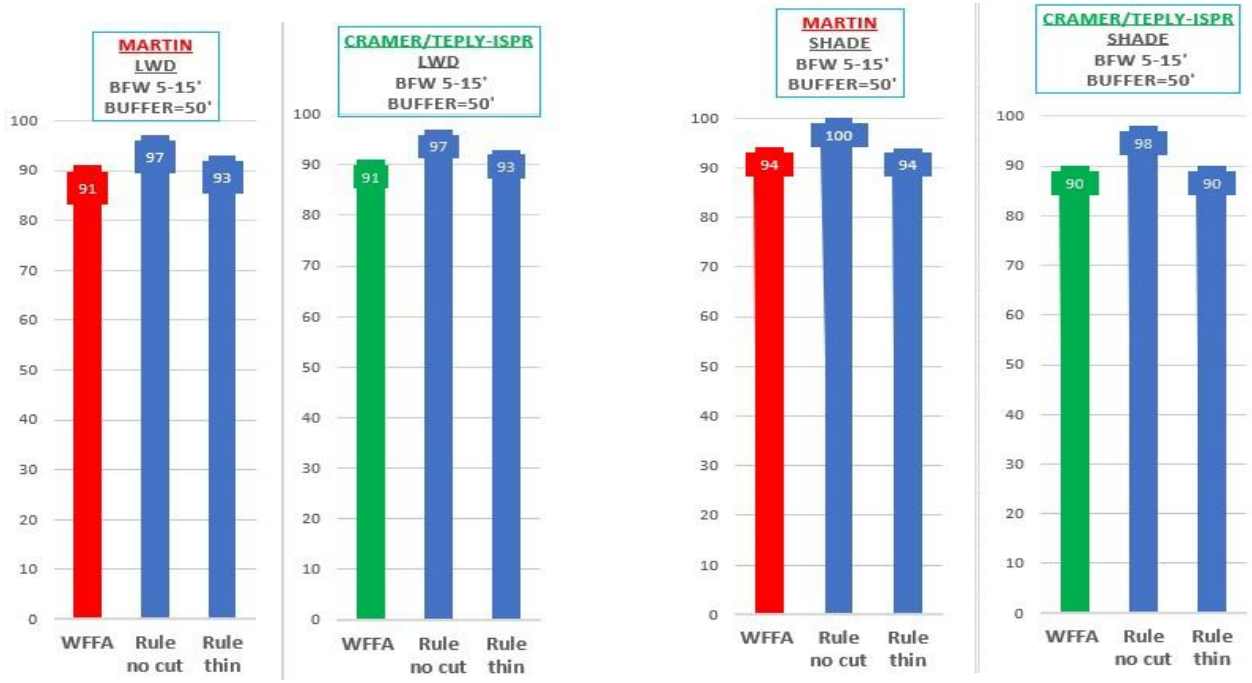
Figure 7-8—(A) Relation of distance from stream channel to cumulative effectiveness of ecological factors influencing microclimate in riparian ecosystems (FEMAT 1993: V-27); (B) modified effectiveness curve for relative humidity as a function of distance from the stream channel. The curve was changed based on scientific literature developed since the original curve was portrayed in FEMAT (1993). Source: Reeves et al. 2016a.

Alternate Plan Approval Standard (WAC 222-12-0401 (6)): Relies on best professional judgement of those professionals reviewing your proposal. In <u>part</u> it requires they consider if your proposal is ". . equal in overall effectiveness. . ." to the existing rules and legislation (that include many other qualifiers including short term loss for long term gain, and "relatively low impact" considerations specifically for SFLOs).

To help with the relative "effectiveness" part of the multi-faceted AP approval standard (for a WFFA template proposal that didn't get Forest Practices Board approval) scientists reviewed multiple studies looking at the relative effectiveness of rules compared to smaller buffers. Below are graphical representations of their best professional judgement (from several scientific research papers) for both 50' and 75' potential RMZs for LWD & Shade functions on large and intermediate size streams. The "Cramer/Teply – ISPR" reviewers were independent contractors hired by DNR within the Adaptive Management Program. Summary: A lot of science and scientists confirm smaller buffers are/can be generally equal in functional effectiveness to many of the rule buffers. Again, your particular site, short term vs long term considerations, "relatively low impact" ok for SFLOs, and many other tangible/intangible factors are part of the field review process so don't presume this, or any other science necessarily will lead to AP approval by field professionals empowered to make the final decision about your particular proposal. All Alternate Plans are considered separately!



*Relative Effectiveness of **LWD and Shade** with 75' Buffers for large streams compared to the Forest and Fish Rules as Determined by WFFA Scientist (Martin) and an Adaptive Management Program Contracted Scientist (Cramer/Teply), & Peer Reviewed (ISPR).*



*Relative Effectiveness of **LWD &** **Shade** with 50' Buffers for intermediate sized streams compared to the Forest and Fish Rules as Determined by WFFA Scientist (Martin) and an Adaptive Management Program Contracted Scientist (Cramer/Teply), & Peer Reviewed (ISPR).*

Reminder of DNR Help: DNR Regulation Assistance Foresters are available to **help you "understand", "develop", "implement", & "facilitate" your site-specific Alternate Plan with the ID Team** reviewing your proposal in the field. If you want DNR help contact them at www.dnr.wa.gov/sflo, 1-800-523-8733, OneStopShop@dnr.wa.gov , or to Find Your Forester https://foresthealthtracker.dnr.wa.gov/FindYourForester/Index.

Special Note to SFLOs in Eastern Washington: Alternate Plans have not been cost effective for you! All these recent BM 21 changes along with the increased help from DNR will hopefully be a game changer to finally allow you to benefit from the Alternate Plan process, particularly on *long-term forest health issues or to better position a stand to survive a fire while providing riparian function."*

We all benefit if the AP tool is used more! Give it a try. Good Luck,
Ken Miller

(More details and examples of potential application answers are in the 2015 edition below. Over time we plan to post real examples of approved APs on the WFFA website.)

2016
An Unofficial Guide To
Helping SFLO Alternate Plans Succeed

Intent: Forest and Fish provides small forest land owners (SFLOs) significant regulatory deference in Alternate Plans (APs) to offset the disproportionate impact of the rules where we can also show relatively low impact on stream functions. APs allowing additional harvesting can be very complex and intimidating (at least the first one) so few SFLOs take advantage of this opportunity. Eventually we believe much easier "template" versions will be available. Until a low impact template is available this unofficial document is intended to: provide SFLOs with supplemental information to help you understand the process; and offer some hypothetical examples of potential strategies to demonstrate riparian protections in your particular AP application.

With the help of numerous volunteer editors, we believe the AP intent and process information is accurate, although it contains some unofficial interpretations of the author(s). The examples provided may or may not be acceptable depending on the size of your harvest, your site conditions, and who is evaluating your particular application. To be successful you must get the DNR Forester approval based on his/her best professional judgement of your proposal in a multi-stakeholder process, at your planned harvest site. Most of your peers that have tried APs like the results. ☺

Small landowner encouragement in Forest and Fish: "*The legislature further finds that small forest landowners should have the option of alternate management plans or alternate harvest restrictions on smaller harvest units that may have a relatively low impact on aquatic resources*." (RCW 76.13.100(2) partial & WAC 222-12-040[2]) The phrases "smaller harvest" and "relatively low impact" remain undefined – hence the Alternate Plan &/or the "Template" process to help clarify these conditions at your particular site. Our SFLO "Forest and Fish" negotiators understood, and the legislation seems to agree this language generally meant "smaller buffers for smaller harvests" where factors such as:

stream width; stream length; size of your harvest; and the managed acres inside the regulatory Riparian Management Zone (RMZ) in your harvest unit would be considered in addition to particular site specific features DNR and an ID Team will use to help determine "relatively low impact". If your prescription is deemed "relatively low impact" mitigation should not be required, especially for SFLOs.

The Alternate Plan (AP) process may seem daunting to SFLOs, at least until they have done one. To include lots of potential examples for each RMZ function this document is necessarily long – however you may not need to review all RMZ functions depending on how close to the stream you wish to manage. Following are the major subjects addressed:

- Intent of Document and the Legislature Page ~~1~~ 7
- General Information and Advice Page ~~2~~ 8
- Alternate Plan Approval Standards Page ~~4~~ 10
- Alternate Plan Process Page ~~4~~ 10
- Other General Considerations Page ~~5~~ 11
- Other Guidance Reference Materials Page ~~6~~ 12
- **Potential Answers** to AP Form Question #3:
  - **General**, including SFLO Deference Page ~~8~~ 14
  - **Site-Specific** Considerations Page ~~10~~ 16

  RMZ Functions to address in your AP:
  - **Large Woody Debris** – Full Width of RMZ Page ~~14~~ 20
  - **Shade** – if operating within 75' of stream BFW Page ~~19~~ 25
  - **Bank Stability** – if operating within 30' of BFW Page ~~23~~ 29
  - **Sediment Filtering** – operating within 20-30' BFW Page ~~25~~ 31
  - **Nutrient Input** – if operating within 30-40' BFW Page ~~27~~ 33
- **Summary** Page ~~28~~ 34

General: Alternate Plans (AP) are rarely attempted by SFLOs themselves, nor often used by consulting foresters, due to perceived complexity and cost relative to financial or resource benefits - although there are many examples of DNR approved Alternate Plans that saved landowners thousands($) by releasing trees for harvest that would otherwise be required to be left standing under standard rules. Even if not attempting an AP yourself, a review of this document might help you decide if an AP is a worthwhile option for you and your professionals. Competent professionals who have a positive relationship with DNR will likely: simplify and ease the process; identify unique land features suitable for APs;

increase net returns/resource benefits; & increase the chances of AP approval. Prior to attempting an Alternate Plan you need to have a clear understanding of your harvest site's resource attributes. Important details to know: your Site Index and stream type; any stream type break points; steep &/or unstable slope areas; and Bank Full Widths (BFW). When using the Alternate Plan (or Templates) you should select the "5 year" option to ensure maximum market timing or logger flexibility. An AP may also be used for multiple management units within larger contiguous ownership – better yet, maximize all the AP advantages (with more pre-work, less future work) if you do multiple harvests over time by completing the Long Term Alternate Plan (15-year permit) available to SFLOs. This 15-year permit allows subsequent harvests with just a 5 day notification!

To help decide what management you want to propose in your RMZ, you might consider using one of the site specific prescriptions in the draft template WFFA has proposed to the Forest Practice Board (see WFFA Website) – prescriptions we believe are all supportable by science as "low impact" prescriptions that continue to provide a very high % of desired RMZ functions. All Alternate Plan prescriptions are subject to individual approval or conditions by DNR foresters based largely on site review and site-specific situations. It is essential to schedule a site visit with DNR prior to beginning the application process. Have a clear plan of what your objectives are as they can help guide you toward a plan that has a good chance of success – objectives such as prescriptions that: better fit your particular land topography & operational efficiencies; facilitate short and long term forest health and/or restoration efforts; significantly improve your forestlands' short & long term economic viability (particularly for SFLOs disproportionately impacted by rules).

This pre-application/pre-ID Team site visit will help get a better grasp of the potential obstacles to what you initially think would be relatively low impact management prescriptions – ask for their help at least to identify any likely contentious prescriptions some folks may not view as "relatively low impact"! Many/most DNR Foresters (as well as WDFW, Ecology, and tribal staff) recognize SFLOs were disproportionately impacted and will try to help where they can, especially if asked early in the process. (Technically, DNR is supposed to help SFLOs with their APs through the Small Forestland Owner office but they simply do not have the staff! (RCW 76.13.100 and WACs 222-12-0402, 0403, & 0404). If

you aren't connecting with your DNR Forester don't hesitate to ask for supervisor help/clarification – a successful AP requires DNR understanding and support.

Alternate Plan Approval Standard WAC 222-12—0401 (6): *"An alternate plan must provide protection for public resources at least equal in **overall effectiveness** to the **protection** provided in the **act** and rules*." (Emphasis in **bold** added) This approval standard is viewed in both the short term and the long term so it is necessarily a professional judgement call about overall effectiveness as there are no standard ways or formulas to measure whether your AP meets this standard.

ID team members and DNR foresters are presumed to apply this approval standard as intended in RCW 76.09.368 which says in part: "*The legislature intends that small forest landowners have access to alternate plan processes or alternate harvest restrictions, or both if necessary, that meet the public resource protection standards set forth in RCW 76.09.370 (3), but which also lowers the overall cost of regulation to small forest landowners including, but not limited to, timber value foregone, layout costs, and operating costs*." – In other words, assume they want to help you as required by the Forest and Fish Act. You need to help them understand how your low impact harvest plan does indeed meet the test of "*at least equal in **overall effectiveness** to the **protection** provided in the act and rules".* Do this with ample reasoning that your proposed prescriptions provide not only economic benefits to you but also sufficient ecological function protections or enhancements ("relatively low impact on aquatic resources") within the RMZ at a site, or at the landscape level. Timber Harvesting rules (WAC 222.30.010 [3]) suggest APs are particularly suited for ". . . treatment of riparian forests which may be understocked, overstocked or uncharacteristically hardwood dominated while maintaining minimum acceptable levels of function on a landscape scale." – presumably this would include forest health situations.

Alternate Plan Process: After you have submitted a Forest Practice Application (FPA) with the Alternate Plan form, the DNR will appoint an Inter Disciplinary (ID) team (including WDFW, Ecology and relevant tribes) to join the DNR (& landowner/representative) while conducting a site visit to help evaluate your Alternate Plan prescriptions. If you have concerns about individual non-DNR folks visiting your property do advise your DNR Forester. Some key points regarding this ID Team process are worth noting: everyone's opinion is valued, but it's the sole responsibility of the DNR forester to make the final decisions; the on-the-

ground prescriptions in our existing rules may be changed to your harvest plan if you can demonstrate "relatively low impact" on the RMZ (stream adjacent) **functions**; the ultimate approval decision is rightly based on the best professional **judgment** of the DNR forester that you and your application have convinced DNR (& preferably all or most ID team members) your prescriptions are "relatively low impact". If specific prescriptions are not deemed appropriate during the ID team process, the members will usually work with you to try to develop win-win alternatives.

Even if your Alternate Plan is prepared by a consulting forester, you as the landowner should be present at any ID team reviews to make part of your own pitch for help – help that most of these folks likely want to provide worthy landowners. Remember to be patient and civil. ☺ Politely ensure they are aware you are a SFLO that is entitled to the "alternate harvest restrictions" as intended by the various RCWs and WACs relating to SFLOs.

Some SFLOs report that some DNR Foresters seemingly simply defer to ID team voices rather than making independent decisions based on all input. ☹ That is a risk of the AP process - a process that needs an on-site decision maker. Supporting details help more than negative emotion. Regardless, prior to approval, the DNR representative must be convinced the intent of all the rules and laws have been met when looking at the totality of the Alternate Plan Approval Standard (which provides some deference to SFLOs).

Other General Alternate Plan Considerations:

While a narrow interpretation of the Alternate Plan Approval Standard might limit the decision to RMZ function concerns, Alternate Plans are also intended to give DNR some discretion to landowners, particularly SFLOs. From *Section 21 Guidelines for Alternate Plans*:

1. *Where cumulative impact of rules disproportionately affects a landowner's income production capability.* (SFLOs rarely utilize this key justification in AP Guidance – use it or lose it!)
2. *Where a landowner's minor on-the-ground modifications could result in significant operational efficiencies.*
3. *Where site conditions have created an economically inaccessible management unit when using the forest practices rules.*

4. *Where local landforms lend themselves to alternate forest management practices.* (The most frequent reason for APs, i.e. smallish, low energy streams, gentle or high bank/ridge topography, lots of shade, reverse breaking slopes, obstacles in the RMZ such as roads, power or pipe lines where narrower width buffers make a lot of practical sense).
5. *Where a landowner proposes methods to facilitate landscape, riparian or stream restoration.*

These are all legitimate/sanctioned reasons to deviate from the rules in Alternate Plans so don't be shy about raising these issues where they are appropriate to your ownership. Some SFLOs report that occasionally some DNR Foresters and ID team members seem to believe an Alternate Plan must be equivalent to the prescriptions (rather than 'effectiveness') of the one-size-fits-all rules without regards to the totality of the Approval Standard and the Alternate Plan Guidance. ☹ However, best professional judgment as it is intended to be applied in the AP process allows for, and in fact requires, that **all** factors affecting resource protection, enhancement, financial impact, and operational efficiency be considered.

Other Guidance Reference Materials:

It would be very helpful for you to read Board Manual Section 21 – pages M21-1 through M21-8 before trying to answer AP form question #3 in a persuasive manner (http://file.dnr.wa.gov/publications/fp_board_manual_section21.pdf). Another good reference is DNR's "Alternate Plans for Family Forests" (http://file.dnr.wa.gov/publications/fp_sflo_altplanfaqs.pdf). As your forest management moves closer to the stream, the functions needing the most attention/justification in order of their cumulative "effectiveness" are:

- large woody debris (potentially comes from the full width of site class regulatory RMZ), then
- shade as it affects water temperature (up to 75' outward from BFW).
- The remaining RMZ functions typically overlap and are generally important within about 30' of BFW (filtering & nutrients may be important even further out, particularly on steeper ground):
    - bank stability (root strength);
    - sediment filtering; and
    - nutrient input (litterfall).

All these functions are required to be protected in “low impact” ways and their general relationships are depicted in *Figures 1 & 2 on the following page*.

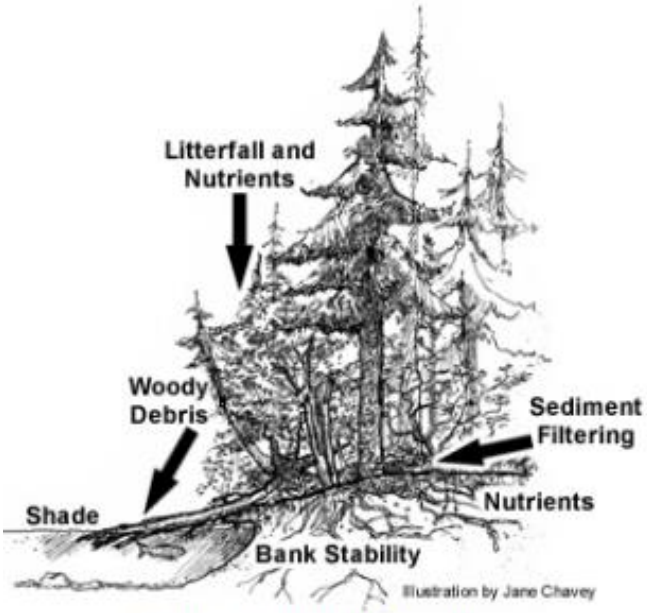


Figure 1. Riparian function.

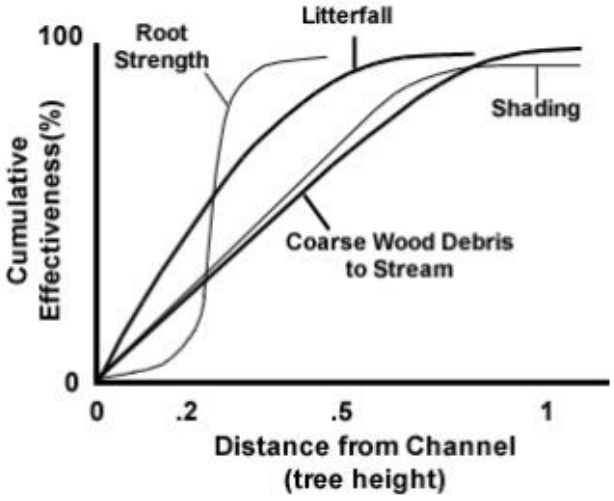


Figure 2. Cumulative effectiveness of various riparian functions.
From Forest Ecosystem Management Assessment Team (FEMAT), (1993). *Forest ecosystem management: an ecological, economic, and social assessment.* Washington DC: US Government Printing Office 1993-793-071.

Potential answers to AP Application Form Question #3

(http://file.dnr.wa.gov/publications/fp_form_fpan_altplan.pdf)

"3. **Describe** ***how your proposed management activity would affect the alternate plan area***

For activities in a riparian area:

a) Describe the current level of large woody debris, shade, bank stability, sediment filtering and nutrient input.

b) *Explain the short and long term changes in the amount of large woody debris, shade, bank stability, sediment filtering and nutrient input from the current level. Be as specific as possible. See Board Manual Section 21*"

You certainly don't need/want to use all the examples in blue on the following pages – pick and modify with specifics the examples most appropriate for your site and keep it brief – saving lesser but valid points for on-site discussions.

General Potential Statements Pertinent to the Question #3 and the Approval Standard:

After passage of the Forest and Fish "*Act*" a Small Business Economic Impact Statement (SBEIS)(1/22/2001) determined this legislation would have disproportionate impacts on SFLOs. Therefore the Forest and Fish "*Act*" provided mitigation for SFLOs (RCW 77.85.180[5(e)] & WAC 222-12-040[1]), some of which provided some level of deference to SFLOs in the Alternate Plan processes, including in the Alternate Plan Approval Standard - "*An alternate plan must provide protection for public resources at least equal in overall effectiveness to the protection provided in the* ***act*** *and rules*."

Again, your Alternate Plan FPA is ultimately subject to the best professional judgment of the DNR (in consultation with you and ID team members) where you must pass the "silly grin" test by meeting their interpretation of the totality of the AP Approval Standard which does reference the "act" - which in turn allows/encourages some deference to SFLOs. Some hypothetical general potential statements include:

1. Without utilizing the proposed prescriptions on my ownership approximately ___% of my timber would be unharvestable which would be a clear disproportionate impact on my *income production capability.* (note: anything above industry averages [approximately

10-15%?] should qualify as disproportionate)(Also note that while there is a Forest Riparian Easement Program to potentially help SFLOs with "disproportionate impact", the Alternate Plan Guidance also requires similar consideration – one mitigation option should not preclude the other).

2. To help ensure/reassure appropriate restoration and/or regeneration survival, emphasize your regeneration plans (describe what you will do in addition to the number of seedlings of what species) and any corrective actions you might anticipate. One strategy might be saving planting costs with fewer seedlings, but very aggressive protective actions until free to grow. (if an adequate regeneration plan is not in your application, DNR will likely add more specifics as a condition – best to proactively include detail on what works best for you.)
3. Include any scientific literature you may have, particularly on potentially contentious RMZ function issues.
4. State why your proposal is a "*less costly regulatory prescription"* for you (RCW 76.130.110[3]).
5. Provide some perspective about your past and future *long term commitments to stewardship* (RCW 76.13.005[5]) that gives confidence and justification for deference requested in your Alternate Plan as "*incentives to encourage continued forest management"* (RCW 76.13.110 [5][e]). An example might incorporate some or all of the following:
    - *i.* The purchase and management of this parcel is part of a long term family investment.
    - *ii.* We want this prescription to be economically viable and successful over time so future generations will be more inclined to keep this property forested.
    - *iii.* The prescription helps meet my long term stewardship objectives (list any pertinent ones)
    - *iv.* This property is/will be enrolled in the American Tree Farm System (or other similar certification program) to further ensure your forestland is managed properly over time.

v. I have a Stewardship Plan that I follow and am actively involved in learning more by being a member of the Washington Farm Forestry Association. ☺
vi. I live on the property, and do a lot of the management myself which allows me to minimize impacts on the land and the wildlife while maximizing the economic viability of keeping this highly sought land in timber production.
vii. Include examples of past successful regeneration on harvests very close to the stream to demonstrate your *long-term commitments to stewardship.*

Site-Specific Alternate Plan Considerations for your answers to Question #3:

1. Your harvest prescription follows the 20-acre exempt rules (http://apps.leg.wa.gov/wac/default.aspx?cite=222-30-023) even though you technically don't qualify (because your parcel is larger than 20 acres, or you own more than 80 acres) – but your total harvest area is only _____(something less than 20 acres) and well within the low impact spirit/intention of these legislatively approved prescriptions.
2. Your proposed harvest is ____ acres and the RMZ portion is only ____ acres which is much smaller than the "rule" allowing 120 acre regeneration harvests for unlimited stream reaches so it seems to inherently have a *relatively low impact on aquatic resources*. (Size matters!!)
3. Your coastal forestland is higher site than most and also has more streams than most – a double whammy that would tend to justify smaller buffers due to disproportionate impact deference's allowed in the Alternate Plan Guidance.
4. Your standard rule RMZ leave trees are highly prone to wind throw, most of which will not contribute to RMZ functions, in fact they may unnaturally contribute sediment – taking the economic value of trees quite likely to blow down away from stream makes economic viability common sense.

5. Your proposed harvest plan within the RMZ has high economic value but low functional impact such as "*minor on-the-ground modification*" strategies that include: individual tree selection; group selection; and/or small patch cuts which are insignificant to *overall effectiveness*. ("de-minimis"). (Flag the specific tree's you want to take from the RMZ to facilitate quick review/decisions by those ID team professionals on site that are likely wanting to help you select trees without significant impact on functions.)
6. You are proposing to utilize variable width buffers ("minor on-the ground modification") that fit the topography and/or economics that can be very site-specific and often also make sense to ID team professionals wanting to accommodate you "on average" without significant impacts. (Provide your minimum and maximum distances from BFW and distances between measurements.)
7. You are proposing to utilize individual tree, group selections, small patch cuts, or thinning within the RMZ that will better replicate historical patchy conditions, and support higher levels of critter habitat and bio-diversity than "no-cut" lower diversity strategies. (Emphasize that the leave trees are intended to remain permanently.)
8. Your proposed harvest & management strategies within the RMZ have long term restoration/enhancement/facilitation benefits to RMZ functions that require "*appropriate recognition or credit for improving the condition of public resources*." (WAC 222-12-0403 [4]) Examples on your land might include:
    a. Conversion of hardwood or heavy shrub layered sites that are historical conifer sites back to conifer "*while maintaining minimum acceptable levels of function on a **landscape scale***". (WAC 222-30-010 Timber Harvesting [3]).
    b. Regenerating hardwood portions of soon to be decadent hardwood stands on hardwood dominated sites to avoid long term loss of LWD & Bank Stability functions by leaving probable short term LWD candidates (or placement). Without a regeneration strategy on hardwood dominated sites it's likely the site will eventually be heavy brush that is devoid of quality LWD potential. (Conifers can be grown in many hardwood

dominated sites, but you must demonstrate special efforts to be successful.)

c. Treating forest health situations, particularly on the Eastside, such as high fuel load, overly dense, non-seral stands that are at high risk of imminent mortality from fire or disease.
d. Thinning overstocked stands at risk of very slow, if ever, progress towards desired future condition (fewer but bigger trees). (consider using Westside Over Stocked Stand Template)
e. Improvement of long term LWD & Bank Stability functions within Channel Migration Zones. (Focus on long term benefits (list) to the resources, even if short term loss (list) (– i.e. thinning overstocked stands to increase the vigor or remaining trees could be a long term benefit to bank stability, future LWD quality, shade?).

9. Your proposed harvest area includes smaller streams (less than 15' (?) BFW), and or seasonal stream segments ("Fish" or "Non-Fish") where the site-specific conditions will not likely compromise specific functions or *"overall effectiveness"*.
10. Your proposed harvest area within the RMZ includes a reverse break in slope away from the stream, precluding most functional need for buffers beyond that break.
11. Your proposed harvest area includes an obstruction in the RMZ such as roads, powerlines, or improvements that preclude most functional benefit of buffers outside these obstructions. (Trees adjacent to roads or structures may be considered a public safety/road maintenance issue not subject to FPA approval).
12. Your proposed harvest area includes a stand that is inaccessible without the temporary corridor through the RMZ in your plan – also consider proposing adding the corridor trees to your log deck for shipment rather than leaving on site, especially if you are disproportionately impacted by the rules. (see #1 in potential General Statements above)(also note a Forest Practice Hydraulics Permit is required for all stream crossings where you will need to describe how you will remove logs and avoid altering the stream channel)
13. You propose harvesting more RMZ trees where streams are disconnected from other streams by lack of surface flow in a channel

- so there will be little to no effect on downstream water temperature or sediment delivery.

14. Your harvest prescription follows the (Fixed Width?) template, EXCEPT additionally proposes _____ which affects the "area of influence" of only _____(list) functions - and/or are so few extra tree's the effect is de minimis. These prescriptions still provide low or no overall effectiveness impact because _____ (see potential answers on following pages for each of these functions).
15. Your harvest area includes narrow steep sloped inner gorges where rule required leave trees are susceptible to wind throw that can cause some real water quality and increased bank stabilization issues after wind throw - where the short term harvest impacts of shade loss can be outweighed by reduced sediment delivery risks. (May not apply if chance of delivery to development – or perhaps all the more reason to take those trees?) A new tree crop will be planted and should grow quick enough to replace the root strength of the decaying stumps after harvesting some/all the inner gorge trees.
16. Your harvest plan includes low gradient intermittent streams where removal of more trees than allowed in the rule will have relatively low impact on RMZ functions.

Alternate Plans must address some or all RMZ Functions

The following pages are intended to provide some specific function protection guidance on each of the RMZ functions that could be affected by your management plan, along with potential examples (to modify) for your particular harvest area. If you are not planning to do any harvesting within 75' of the stream you can probably skip all but this first section on Large Woody Debris.

When completing the AP Application Form Question #3 consider modifying your RMZ function attributes to something like one or two of the examples **below**:

Large Woody Debris (LWD) (availability and recruitment):

a) To the best of your ability characterize (count & measure if possible) the *current level* of *large woody debris* in, above, leaning towards, or adjacent to your stream that is, or in the future is likely to provide LWD structure & complexity (pools & ripples) to stream flows in ways that stabilize streambeds by holding sediment, helps build floodplains, provides nutrients, retains spawning gravels, or generally supports fish and amphibian habitat. Very generally, targets for ample instream LWD in Western Washington would be: large enough to remain in place during peak flows; form small pools for holding and rearing fish; be 1 ½ times the Bank Full Width (BFW) in length; and average one/75' of stream reach (or four/300', or thirteen/1,000'). Some partial/incomplete examples might be:

    1. The stream segments in this FPA are generally ___ ' bank full width, are (low – high) energy, __ (degrees if possible) stream gradient, with _____stream adjacent topography.
    2. The stream segments in this FPA already have (adequate/significant/# per 1,000' stream?) amounts of LWD and there are ample (trees/acre – average spacing) adjacent (0-50+ ft from BFW) trees for future recruitment. The stand is overstocked and is experiencing competitive suppression (trees are dying).
    3. The RMZ stream adjacent species are predominantly _____ and range in size (& age?) from ____ to _____. The understory is _____.
    4. Stream segments # ___ & # ____ contain very little in-stream LWD although ample potential recruitment adjacent to the stream will be

retained. Stream segments #____ & #____ have ample LWD both in and over the stream with ample adjacent recruitment trees.

5. Essentially all stream adjacent trees are mature/nearly decadent, smallish rootwad, hardwoods which will ultimately/likely convert to low quality brush without a restoration effort. The available smallish, low quality hardwood LWD recruitment will decay more quickly than conifer, &/or likely move downstream fairly quickly.
6. The RMZ is mixed conifer & hardwoods where the conifers are being suppressed by the hardwoods.
7. This harvest area is high site ground with wide regulatory buffers, despite ample (size/#) LWD available in and recruitable from close to the stream.
8. This coastal area is subject to frequent storm events where clumps or "blow down" strips of leave trees are not likely to remain vertical while their root balls will likely increase sediment into the streams.

b) *Explain the short and long term* effects regarding *large woody debris* resulting from your proposed management activity. Please note that <u>very generally speaking</u> the research suggests that most of the LWD RMZ functions are provided within 50-75' of your stream – the rule required trees outside 75' are primarily to provide <u>additional</u> potential recruitment of LWD. The further away from the BFW the less likely the bole (key piece) of a tree will reach the stream. "Site Class" buffer widths in our regulations originated from an initial negotiated compromise of "one tree height" RMZ width – Alternate Plans and Forest Practice Board approved guidance is mostly about providing stream functions not seemingly arbitrary (but negotiated) protections in the regular rules. Basal area targets for the RMZs are the same (diameter and trees/acre) regardless of Site Class based on research conducted by DNR's Adaptive Management Program. Having a credible strategy for maintaining/increasing short-term LWD while also providing for long-term recruitment is key to getting approval for buffers smaller than the one-size-fits-all rules! Some research suggests that at least 80% of LWD related aquatic functions come from trees within 50' of streams (USDA Pacific Northwest Research Science Findings - October, 2015), while other research suggests <u>additional</u> recruitment comes from greater distances of 75 – 100 ft. (Grizzell et al. 2000, TFW-MAG1-00-003). Some strategies or site specific conditions to demonstrate

both short and/or long term "*equal in overall effectiveness*" and/or "*relatively low impact*" might include:

1. Your proposed RMZ management activities are limited to one side, &/or a very short stream reach (less than say 1,000'?) therefore you believe it is "low impact", relative to wider and longer potential impacts in the regular rules.
2. Your proposed RMZ management plan leaves all/most "leaners" more likely to eventually fall towards the stream.
3. Obtaining long-term LWD benefits by converting hardwoods to conifer (if actually a conifer site)
4. Removal of hardwoods and retention of larger/largest conifer which are longer lasting will speed the development of larger, higher quality LWD.
5. Releasing understory (describe) conifer from competing brush and hardwood vegetation increases the size and quality of future LWD recruitment much faster than Mother Nature.
6. If the stream seems to have too little LWD, offer to help accelerate LWD functions by placing LWD in the stream. This LWD can come from: outside the RMZ if stocking is light in the RMZ; or from within the RMZ if it is overstocked, or from within the RMZ if considered "low impact" on long term recruitment:
    a. LWD placement with directional falling (or tipping where root wad remains attached) is an effective way to improve function much faster than waiting for Mother Nature (and requires fewer leave trees)(some reasons may exist to avoid placement, particularly in higher velocity streams – placement offered but not accepted should still merit some consideration in support of your AP, particularly when placement can occur without any significant effect on long-term recruitment).
    b. Tipping tree's from the outer or inner zone of your RMZ to: provide quicker function enhancements; utilize LWD less likely to naturally recruit; and retains closer trees most likely to naturally recruit LWD in the future. (See also Board Manual Section 26 *Guidelines for Large Woody Debris Placement Strategies)*
    c. Bringing in large old conifer logs to replace blown down or harvested hardwoods.

d. Your harvest site is prone to high wind storm events (why?) where nearly all leave trees will likely blow down (likely creating higher volumes of stream sediment &/or wasted resource – most economically viable, quickest function benefits, and least RMZ function risk occurs with directional falling and harvesting rest. Harvested wind prone sites would be regenerated – wind throw typically occurs after normal planting so this stream adjacent ground will become a brush hole after wind throw without meaningful future LWD recruitment.

7. My hardwood dominated RMZ site is over mature, as evidenced by large alders and maple, some mortality, brushy openings, and many leaners. The stand is beginning to convert from forest to brush where it makes sense from both RMZ LWD functionality, and economic justification to regenerate a new hardwood stand for more long term vigorous and higher quality LWD. (Perhaps leave some stream adjacent Maple with high shade quality that doesn't tend to die out but continually sheds smaller LWD and provides great bank stability with ever larger root masses - keeping the trees & brush closest to the stream will help sell hardwood regeneration prescriptions).
8. My high site harvest area has ample high quality instream and recruitable LWD adjacent to the stream - leaving these wide buffers provides little to no additional LWD functional benefit.
9. My stream segments are less than 15' bank full width where LWD is not typically exported downstream, and where smaller LWD can often effectively form well-functioning habitat in such small streams. The smaller the stream the smaller the LWD that can still be effective.
10. My stream segments are actively undercutting trees, providing an abundance of LWD – or are subject to periodic disturbance events (fire, wind, disease, landslides) that frequently provide LWD so should not need wider (rule) buffers to ensure LWD recruitment that is regularly provided naturally even without such wide buffers.
11. My stream segments are large (> 15') and therefore require much larger diameter LWD to be effective pool forming wood – larger LWD boles that can only come from very near the water as trees from

more than about 50' BFW would have significant taper on the portions able to reach the water. I.e. the bigger the stream, the smaller the area that functional wood comes from – this stream needs the biggest LWD, which nearly always only comes from very close to the stream!

12. Most/all thinning will be on the less dominant trees – trees that often don't fall into streams when they die, but rather they generally shed their limbs and tops in place/decay in place. Some high value individual trees have been selected for harvesting where there is a low/temporary impact on shade &/or future LWD recruitment.
13. Thinning (from "below") the less dominant trees in RMZs will help the remaining trees grow bigger & faster which increases the long term quality of future LWD. You are leaving at least 57 trees/acre (28'x28') normally required to be left in RMZs.
14. Your RMZ plan targets highly merchantable export logs for harvest and leaves extra low/non-merchantable in a different area.
15. Upstream conditions (steeper confined channels) typically transport ample LWD to your lower gradient stream segment, which in turn tends to accumulate ever more LWD in your low gradient segment reducing the need for as much LWD recruitment in this segment.
16. Your plan for Np streams have narrower RMZs, but are buffered full length – a tradeoff that is more justified where the width of the stream and/or available LWD merits a smaller RMZ.
17. Your Np streams are smaller and have less need for LWD where no fish exist so your RMZ thinning will be from above, leaving ample shade from the less dominant trees &/or brush.
18. Some of your normal leave trees are very likely to blow down in a direction away from the stream increasing the risk of sedimentation and economic loss without providing the rule intended protection – a positive, or relatively low overall impact if you remove more of these trees.

<u>If you plan to harvest within 75' of your stream you must address this RMZ function in your Alternate Plan:</u>

<u>Shade (*to help maintain cool stream temperatures*)</u>:

a) To the best of your ability characterize the *current level* of *shade* over, or direct sunlight on, the water in your stream segment (10 AM-2 PM), with information such as: *Stream size; Topography* (near & far from stream); *Channel orientation*; bank or *understory vegetation* (brush) height during low summer flows; or any known cool water source or temperature information. "Shade" is a surrogate for "cool" water so don't forget non-shade factors that help avoid warmer water in the summer. Some partial/incomplete examples might be:
    1. The stream segments in this FPA are generally ___ ' bank full width; the adjacent stand of timber is (conifer, hardwoods, mixed?); the understory and stream adjacent brush are (species, size, density); the channel banks are (high? low?), and the topography affects shade by _____.
    2. The stream in this FPA is generally oriented (direction), and has ample (describe) adjacent trees and understory that generally provide ___ % shade during summer months.
    3. Nearly full stream shading exists from adjacent large mature trees.
    4. Steam segments #____ are seasonal and rarely have much if any summer water or need any shade, or at least as much summer shade. (some will argue there might be underground water affected by sun on dry channel??)
    5. These stream segments are spring fed &/or have multiple side streams contributing cooler water.
    6. This stream segment is over 30' wide with little summer shade – shade that would not likely have a cooling effect on the stream temperature even if more shade was available due to the large volume of water flow.
    7. My stream channel is gravel and not bedrock, therefore is less sensitive to direct sun exposure temperature changes.

b) *Explain the short and long term* effects regarding shade resulting from your proposed management activity. "Shade" is a surrogate for water temperature –the real issue! Please note that generally speaking, shade is provided by

trees and shrubs closest to the stream bank – management activities beyond 75' are outside the *area of influence* for shade (as defined in rule). If your proposed activities are within 75' of BFW you will need to discuss why your management activity will not increase your stream segment &/or downstream water temperatures in more than "relatively low impact" ways. Some strategies to demonstrate both short and long term "*equal in overall effectiveness*" and/or "*relatively low impact*" on stream temperature might include:

1. You are not proposing any harvest activities within 75' of BFW so therefore are not likely to have any significant reduction in stream shade.
2. Shade affects peak temperature but has much less effect on daily averages of most larger streams, particularly on the short stream segments in this alternate plan.
3. Increased direct sunlight from RMZ thinning or closer clearcutting on my very small streams may contribute to increased ambient air temperature (hot days) and maximum stream temperatures, but ultimately has little to no effect downstream (500-1,000').
4. Thinning RMZs will help develop understory brush that contribute much of the shade on my intermediate and smaller streams where brush is the dominant provider of shade.
5. This portion of the stream goes dry in the summer months so water temperature is not likely affected by shade due to thinning more RMZ trees and/or having a narrower RMZ than rule.
6. This portion of the stream is larger than *30 feet wide* so water temperature is not greatly influenced by shade. (particularly true as streams get even wider)
7. My stream segments affected by this Alternate Plan are less than 500-750' of stream reach where sunlight has little to no effect on overall stream temperature. (Note: Fully exposed stream reaches beyond 750-1,000' are likely to have slightly increased temperatures and won't recover to normal before going through forested area for about the same distance downstream.)
8. Stream canopy cover below my stream segment will remain for the foreseeable future, or at least until my RMZ canopy has filled out or is fully re-established after my management – therefore any potential water temperature increases from my Alternate Plan will

have likely returned to pre-harvest temperatures within 500'(? – similar to harvest length) downstream.

9. Any potential stream temperature increases from RMZ harvest activity are temporary (10 years?) and offset by long term RMZ benefits such as better quality LWD potential (due to thinning), and increased likelihood this property will remain forested long term because of increased economic viability.
10. Any potential stream temperature increases are temporary (10 years?) and are often offset in part by increased nighttime cooling without canopy cover (radiant insulation); &/or by increased fish productivity resulting from increased sunlight to that relatively short stream segment.
11. My stream segment widths are significantly narrower than 15 feet (especially if less than 5'?) where only the vegetation within (??) feet of the BFW provides essentially all the necessary shade.
12. My stream segment widths are generally less than 10' where many biologists agree (especially if less than 5') most of the direct shading is provided by understory brush immediately after harvest &/or within a couple years of harvesting near streams.
13. My relatively high stream segment banks are stable and not subject to canopy openings from erosion or other stream bank disturbances.
14. Other stream characteristics that tend to at least partially preclude any significant summer stream temperature increases from direct sunlight include:
    a. Spring, or Hydraulic Dam fed streams (However, beaver dam water is likely warmer, not colder)
    b. Deep (vs shallow) water streams
    c. Lots of gravel in streams beds (Hyporheic exchanges)
    d. Other?
15. My proposed management will have no/very little effect on direct midday summer sunlight on the water because:
    a. We are operating on the north side of the stream
    b. There are high banks/ridges precluding significant direct sunlight.
    c. The brush and stream adjacent trees being left provide essentially full canopy cover.

16. Your management adjacent to Np streams will have narrower RMZs, but are buffered and shaded full length rather than 50% length in rules.

<u>If you plan to harvest within 50' of your stream you should address the following three RMZ functions in your Alternate Plan:</u>

<u>Stream Bank Stability</u>:

a) To the best of your ability characterize the *current level* of *bank stability* along your stream that could include factors such as: rates of erosion if any; imbedded LWD &/or root wad presence (all good); vegetative cover; steep or gradual banking; other? Some partial/incomplete examples might be:
    1. The RMZ slope adjacent to BFW is approximately ____ percent and shows no stability issues.
    2. This is a low-velocity stream that typically overflows banks (or doesn't?) during storm events, rather than cutting into high banks.
    3. These RMZs do have a lot of connected root masses (good) within the RMZ and adjacent to the stream bank.
    4. I don't find any evidence of bank undercutting that might be exacerbated by nearby management activities.
    5. The stream banks are mostly hard rock, precluding significant bank erosion.
    6. Where you have Channel Migration Zones adjacent to BFW describe any forest degradation that reduces root holding capacity of the bank.

b) *Explain the short and long term* effects regarding *bank stability* resulting from your proposed management activity. Please note that generally speaking, stream bank stability is impacted most by what's happening within about 30' of BFW. It's also important to note that some stream bank erosion is healthy – to help *various in-stream habitats*, particularly LWD and spawning gravel recruitment. Some strategies to demonstrate both short and long term "*equal in overall effectiveness*" and/or "*relatively low impact*" might include:
    1. You are not proposing any management activities within 20-30' of BFW so therefore will not have any effect on bank stability.
    2. Your proposed RMZ management activities (beyond ½ crown width – approximately 30') are limited to one side, and/or a relatively short (less than 1,000') stream reach.
    3. All heavy equipment will be excluded from within 30' of BFW and slopes greater than 30% will exclude heavy equipment for (feet?) of BFW.

4. You are not doing any harvesting on slopes over ___%
5. Do your stream adjacent soil types include a “gravely” component that could be good for fish, particularly if stream bed is gravel deficient?
6. The stream banks & channels are mostly hard rock, precluding significant bank erosion.
7. If you are having stream bank erosion do you have ample adjacent trees to replace those going into the stream?
8. If stream bank is eroding, particularly on “silty” soils can you/are you proposing to plant soil holding/depositing vegetation?
9. Will your LWD placement strategies contribute to eventual bank stability enhancements?
10. You propose leaving all trees on slopes over 70% to maintain the root mass necessary to stabilize the bank. These trees will be below the ridge line, which should help reduce wind throw. (See other examples where these tree are likely to tip over in winter winds.)
11. In areas without an inner gorge, by leaving at least a 15’ no touch buffer the root mass in these areas will be maintained, supporting the stability of the stream edge.
12. Limbing trees inside the RMZ will be done in place thereby reducing any chance of bank erosion and will also tend to enhance the stream structure with insignificant but helpful amounts of small and fine branches – just as done in nature and desired by many biologists.
17. Your Np streams have narrower RMZs, but are buffered full length increasing bank stability further upstream than rules.
18. Your RMZ has timber stands with a lot of root rot &/or insect caused tree mortality where long term bank and soil stability can be helped by a stand replacement with better suited species.

Sediment Filtering

a) To best of your ability characterize the *current level* of *sediment filtering* adjacent to your stream that could include factors such as: vegetative cover; indications of overbank flooding (can be bad); soil types (fine or coarser sediments); existence of adjacent roads or trails; large streams connected to flood plains; smaller incised channels not flood prone; steepness of RMZ ground sloping towards BFW; other? Some partial/incomplete examples might be:

1. The area within the RMZ has little to no bare ground with ample (inches?) debris/structure that prevents sediment from reaching the water.
2. This RMZ area and stream are relatively low-gradient which further protects the stream from fine sediments.
3. The stream adjacent soils are very gravelly with little risk of excess sedimentation.
4. This coastal area is subject to frequent storm events where clumps or "blow down" strips of leave trees are not likely to remain vertical while their inevitable root balls will increase sediment into the streams, while providing minimal LWD.
5. The roads in this harvest unit drain to the forest floor, and not into any streams.

b) *Explain the short and long term* effects regarding *sediment filtering* resulting from your proposed management activity. Please note that generally speaking, unless in very flood prone areas, sediment filtering issues are generally limited to within 20-30' of BFW. Some strategies to demonstrate both short and long term "*equal in overall effectiveness*" and/or "*relatively low impact*" might include:

1. No management activities are proposed within 30' of BFW.
2. Your proposed RMZ management activities (beyond ½ crown width – approximately 30') are limited to one side, &/or a very short (less than 1,000') stream reach.
3. These stream segments are (small, narrow, incised?) and therefore not prone to overbank flows that would contribute sediments from outside the channel.

4. Logs removed from the RMZ will be lifted out with a (shovel?) so ground vegetation and duff layers are not disturbed.
5. All heavy equipment will be excluded from within 30’ of BFW and slopes greater than 30%(?).
6. All heavy equipment will be excluded from inside the break in slope approximately __’ from BFW.
7. Any bare soils in road/skid trails (exceeding __ sq ft) will be seeded with ____, &/or covered with slash to prevent/minimize erosion.
8. Harvest activities will occur during dry periods, and are unlikely to result in sediment delivery during wet periods because . . . .
9. Your Np streams have narrower RMZs than rule, but are buffered full length which helps retain stream adjacent litter and duff to increase sediment filtering further upstream than normal rules.
10. Trees likely to uproot and contribute sediment to streams without contributing to LWD will be removed.

Nutrient Input (& leaf litter fall):

a) To the best of your ability characterize the *current level* of *nutrient input* over &/or adjacent to your stream that could include factors such as height, width, and fullness of canopy cover; conifer (better?) vs hardwood dominated (less good?); forest health; understory species; other? : Some partial/incomplete examples might be:
    1. The RMZ tree cover is mostly ____ and the understory is mostly ____ , creating ample leaf/needle fall and associated nutrient inputs.
    2. The RMZ slopes steeply to the BFW and/or has very tall trees (which increases the distance litter fall can come from – and increases the Nutrient Input *area of influence*.

b) *Explain the short and long term* effects regarding *nutrient inp*ut resulting from your proposed management activity. Please note that generally speaking, the RMZ *area of influence* can be determined by how far leaves/needles typically fall and still reach the stream – i.e. 20-40'+, in most cases – taller trees and deeper valleys provide nutrients from further. Some strategies to demonstrate both short and long term "*equal in overall effectiveness*" and/or "*relatively low impact*" nutrient input might include:
    1. No management activities are proposed within __ feet of the BFW.
    2. Your proposed RMZ management activities are limited to one side, &/or a very short (less than 1,000') stream reach.
    3. All heavy equipment will be excluded from within 30'(?) of BFW and slopes greater than 30%(?).
    4. This alternate plan will result in a short term loss of plant based organic material/nutrients and litter fall, but by planting more conifers (conifer sites only) will ultimately result in better and more sustainable nutrient inputs.
    5. This alternate plan will result in a short term loss of plant based organic material/nutrients and litter fall, but by opening the stream adjacent canopy temporarily (10 years?) for ___feet of stream reach: the additional sunshine will create more stream nutrients beneficial to increased fish productivity; and/or cool summer nights may be as, or more effective cooling water than full canopy cover.
    6. Any bare soils (exceeding __ sq ft) will be seeded with ____ &/or covered with straw mulch.

SUMMARY:

The intent of an Alternate Plan process is to allow landowners a more economical, practical, and/or resource benefiting option to the one-size-fits-all rules. Alternate Plans (or templates) are a real alternative to the standard rules for you, provided you can convince professionals in DNR (& other qualified ID Team members) you are still meeting the "*overall effectiveness*" of the more prescriptive rules (& act!) in *relatively low impact* ways. SFLOs can rightly assume that most DNR and ID team professionals want to help find creative and low impact ways to ensure all RMZ functions are adequately maintained (or improved) over time - while doing so in economically viable ways for SFLOs. Putting your best foot forward with pertinent strategies addressing all functions (& laws) while meeting in your RMZ with ID Team folks will in effect allow your "trees to do the talking" for a successful Alternate Plan. Good luck!

This document written by Ken Miller, is a compilation of sometimes conflicting information, science, and non-consensus suggestions from about 50 private and government professionals for the benefit of Washington Farm Forestry Association members.

Accepted for posting on the WFFA website by the WFFA Policy Committee on March 21, 2016.