A SMALL LANDOWNER'S EXPERIENCE WITH FOREST & FISH RULES

We bought our first forty acres and started tree farming in 1977. After we retired in 1990, we purchased additional land and consolidated it in four parcels totaling 835 acres northwest of Hoquiam in Grays Harbor County. Most of the land was recently logged when we bought it, but there were a few patches of marginal young timber and some older reproduction. After a timber cruise and inventory, I developed a management plan using a 50 year rotation and calling for regeneration harvests every five years starting in 2005, provided markets were satisfactory.

As 2005 approached, markets for our logs were looking up. I had often complained about the Forest & Fish law, but the Forest and Fish Rules (FFR) had been written, and it was now time to comply with them. What I am about to describe is only unique for me and other small landowners who haven't harvested in the last several years. Consulting foresters and large landowner employees have already experienced a few years of the new rules, and it is routine for them.

FOREST PRACTICES APPLICATION

The first step was to order the forest practices permit application from the regional DNR office in Forks. It came in a big bundle of about 20 pages of forms and 38 pages of instructions, along with forest practices base maps, resource maps and site class maps for each of the three sections we would be operating on. Filling out the first couple of pages on the forms was easy – just our names and locations of the activity and negative responses that did not pertain to us.

STREAM TYPING

The next questions were about operating near streams and wetlands. With 100 inches of rain a year and flat to gentle ground, we have lots of streams and wetlands. Many of them don't fit neatly into the descriptions of stream and wetland classes in the rules. These are not the kind of streams where you see salmon thrashing around on the spawning beds in the fall. As far as I know, no one has ever seen a salmon (or trout for that matter) in any stage of life in any of the streams in our harvest areas. But - it is possible because there is enough water and the stream gradients are low. After making an attempt to classify the streams, I called Forks DNR to contact the

forest practices forester (FP forester) I had met a few years ago. He had been transferred to a new job.

The new FP forester returned my call and we met in September. We looked at three streams – one in each section.

Stream #1 is 2-3 feet wide in a pretty well-defined channel through gentle terrain. It goes underground at the lower end of our property, where a 56 inch dbh spruce growing right in the creek bottom pretty much sucks it dry in the summer. Since it does flow underground, the FP forester thought there was a good chance it wouldn't have fish. She would have a tribal biologist check it. I had my hopes raised, but the biologist reported back that he had, indeed, found a sculpin upstream of our property. So, it is a fish stream. This stream had been Type 5, but was modeled on the new maps as a fish stream which ended halfway through our property.

Stream #2 slowly meanders over essentially flat ground. It is intermittent in summer with some pools and dry stretches between. During some winters when it rains steadily for a month or more, the water level rises and floods the road to a depth of 6 inches and width of 50 feet or more. The stream splits a few hundred feet above the road and flows down from there in two poorly-defined channels. At the time of our September visit, each channel trickled under the road through rusted-out 15 inch culverts. The smaller channel could be traced for a couple hundred feet below the road before it is lost underground in a forested wetland. The larger channel can also be traced downstream to the forested wetland, and with difficulty, through the wetland to our west property line. The only time I saw a fish in this stream was several years ago. It was a stickleback in the smaller channel just below the culvert. Our sticklebacks are one to two-inch fish which seem to thrive in shallow pools of warm water. I remember them from a long-ago pulp mill tour. Sticklebacks were used as test animals. Put them in the pulp mill effluent. Wait a specified period of time. If only a certain percent died, the effluent was okay to dump in the river. I told the FP forester I had seen the stickleback years before. We didn't see any fish this time, but she said both channels were fish streams. Although it seemed to fit the description, she didn't consider this a Channel Migration Zone (CMZ) situation. This stream had been Type 3 below the road and Type 4 above. The new maps modeled all of it as fish stream.

The FP forester said the wetlands were forested wetlands because they had some sort of tree cover, even though it was often willow, cascara

and crabapple along with some alder, spruce and cedar. Buffers are not required on forested wetlands, so I was pleased with this interpretation. FFR requires mapping all forested wetlands larger than three acres. Since I couldn't tell whether the forested wetlands were isolated from each other or connected, I spent several days with a GPS receiver getting the locations correctly mapped.

Stream #3 is actually a pond alongside a road. The road was originally a mainline logging railroad constructed in the 1930s. In order to obtain fill for the grade on this flat ground, a steam shovel with a dragline scooped material from beside the grade and placed it on the road bed. This resulted in a good-sized hole in the ground which filled with water. This water is stagnant and dark-colored and looks to be several feet deep. When it rains enough, the pond overflows into an outlet stream. This is also a fish stream. Although we saw no fish, this is the kind of place where I have often seen sticklebacks. The road is a "stream adjacent parallel road", considered undesirable in the road maintenance rules. This stream had been Type 5 and the new maps modeled it as non-fish, but changed it to a fish stream just downstream of our property.

Under the one-size-fits-all FFR, all three of these marginal "fish" streams require leaving the same buffer that would be required on the Humptulips River, a popular fishing stream which borders one of our other properties.

A small stream is tributary to stream #3 within our timber sale area. Under the special rules for the Sitka Spruce Zone, it is type 4 water if it has a drainage basin of at least 13 acres. This one drains about 16 acres, so it also requires a buffer.

RIPARIAN MANAGEMENT ZONES

The FP forester had normally been inspecting big timber company permits. Since I obviously didn't know much about it, she volunteered to help me lay out a Riparian Management Zone (RMZ). I accepted.

The site class map for the stream #1 section shows site III. I have dozens of measurements showing it is actually site II, but saw no reason to argue only to result in an increased RMZ width. The maps for streams #2 and #3 also show site III, with some red alder type along parts of the creek. I thought about trying to get stream #2 reduced to site IV due to slower growth in this swampy area, but my site measurements were still in the site III range. So, all three

streams were considered site III, with a 140 foot total RMZ width on each side.

The FP forester and I met in December to lay out the RMZ on stream #2. The water was somewhat higher than when we were there in September, but the 15 inch pipes still handled it easily. The first thing to decide was the width of the stream – under ten feet or over ten feet? Naturally, I thought it was less than ten feet. We finally agreed the smaller channel and the larger channel above the road were less than ten feet, but the larger channel below the road was over ten feet. The difference is important because a small stream on site III requires a total of 94 feet in the core and inner zones, with some cutting allowed in the inner zone if it meets basal area requirements, whereas a large stream requires a total of 105 feet in the core and inner zones, and no cutting is allowed in either zone.

I thought RMZ measurements, especially where a lump sum payment for a conservation easement may be involved, should be very precise and well documented. I brought some wooden stakes to mark the boundaries. It soon became apparent that these would not be needed because the starting and ending points are not very precise. How do you determine exactly where the bankfull width is on a stream flowing over flat ground when it is dry part of the year and flooding at some times, and how do you measure out perpendicular to the flow of the stream when it makes so many sharp bends? The FP forester hadn't actually laid out any RMZs either, but she had inspected lots of them. She determined the starting point at the bankfull width of the stream. I struck out with the snap-back tape at what I thought was perpendicular to the flow of the stream and tied a red ribbon on a bush at 50 feet to mark the outer edge of the core zone, then at 105 feet (94 on a small stream), I hung a pink ribbon to mark the outer edge of the inner zone. It wasn't necessary to go on out to 140 feet because most of the trees in the outer zone would be cut, and those to be left would be individually marked. When I repeated the procedure at the second spot downstream, I tied my pink ribbon to mark the outer edge of the inner zone, 105 feet from the stream, and looked around. There was the red ribbon I had set from the first point only 20 feet away. Between the bends in the stream and my idea of perpendicular from the stream, this wasn't working out very well. After that, we made measurements about every 100 feet down the stream, then eye-balled the points in between and smoothed out the sharp corners until we had the boundaries of the core zone and the outer edge of the inner zone clearly marked with ribbons.

As we proceeded downstream, the stream became more of a wetland. A small bay of a kind of wetland (maybe Type B?) came into the stream on one side. I wanted to just skip over it and keep marking the RMZ on the other side. The FP forester thought we should go around it. She would call the Washington Department of Fish and Wildlife (WDFW) habitat biologist to get a ruling.

After the training session, the FP forester suggested I use a string box to make my own RMZ measurements. She offered to loan me hers, but I bought one from Forestry Suppliers for $105. I found the string box to work very well. Just tie the end of the string to a bush at the edge of the stream, set the meter, walk out perpendicular to the stream flow, read the string box for a measurement at 50 feet and again at 105 feet (94 for small streams), hang the ribbons, then break the string, walk 100 feet upstream, re-set the meter and repeat the procedure. I did this on the other fish stream RMZs. The RMZ for the non-fish Type 4 stream was 50 feet of no-cut on each side.

It was late March before the FP forester and the WDFW habitat biologist and I got together to look at the wetland which was a kind of tributary of stream #2. The habitat biologist agreed with the FP forester that it was a tributary and the RMZ would have to go around the edge of it. I wasn't happy about this, because I could see it leading into a big part of the area I had intended to log. We worked our way around the wetland, looking for evidence of fish life (none) and debating the merits of leaving trees which may provide shade on the wetland (no way, in my opinion). When we had gone about halfway around the wetland, my patience wore thin and I had an "emotional outburst" and said some things I immediately regretted. No swear words, just some heated comments about the difference between a small landowner like me who was directly affected and the large landowner representatives they are used to dealing with who are only distantly affected. While I regretted the outburst, I welcomed the response. A ribbon was tied to a tree in the middle of the swamp, and that would be the end of the RMZ.

YARDING CORRIDOR

After laying out the RMZ on stream #1, there were about 2.5 acres of timber on the other side, away from the road. Since there was no other feasible access, we would have to bring it across the stream. A Hydraulic Project Approval (HPA) would be required. All of the timber we planned to log would be yarded by excavators (shovels). Our logger proposed to lay some of the trees from the inner zone in and

parallel to the stream channel, using this as a temporary bridge to support the excavator as it swung the logs over the stream. Although a more normal procedure would have been to put in a temporary skid road with a culvert, then remove it, the proposed method would result in less bank disturbance. The WDFW habitat biologist looked at the plan on the ground and approved. The work would be done in less than a week in late July when the stream was almost dry. All logs were to be removed from the stream and laid alongside the others that had been cut from the core zone. FFR requires that all core zone trees cut for a yarding corridor be left (to rot).

DESIRED FUTURE CONDITION

The rules allow some trees to be cut in the inner zone, provided that particular stand is on a trajectory towards a specified Desired Future Condition (DFC). The DFC for site III is 258 square feet of basal area at age 140. I couldn't help but wonder what God-like person (or committee) decided what conditions would be best for the fish in these streams so far in the future. In our case, with some of our timber only 45 years old, they are looking at the year 2100. Are these the same fisheries people who can't accurately predict the number of salmon returning this fall?

While I may not understand or agree with the premise of DFC, it was kind of fun to work with the computer program DNR has set up to determine if we can cut some inner zone trees. I drafted my son to help me measure the dbh of all the trees in the core zone and in the inner zone. I tried to download the DFC program from DNR, but failed due to an obsolete computer, or operator incompetence, or both. I called again on my FP forester, and after some difficulty, she was able to download the program and help enter my data. Another FP forester closer to my home helped me with some of it.

Alder trees in the core zone and inner zone don't count toward the basal area needed for DFC. The reason is that alder only lives to 80-100, so it won't be around at age 140. I've been reading research from Southeast Alaska, where scientists working in second growth hemlock forests very similar to those on the Olympic Peninsula have measured the number and volume of aquatic insects under hemlock and alder canopies and found way more under the alder. These insects are food for fish. Are our fisheries experts so involved in looking out to 140 years that they are forgetting about the next few decades?

After the computer had digested my information, it told me just how many trees we could cut along the outer edge of the inner zone and how many I had to mark for leaving in the outer zone. I selected the best timber trees for cutting from the inner zone and the best wildlife trees for leaving in the outer zone. I painted the final boundary of the inner zone. The logger would clearcut up to that line, with the exception of the wildlife trees I had marked with another color of paint to leave in the outer zone and in the outer edge of the former inner zone. Altogether, we were allowed to cut 155 trees in the inner zone. Since our trees were mostly small hemlock and it took a long time to figure it all out, it may not be worth it, except that my time is cheap.

FAMILY FOREST FISH PASSAGE PROGRAM

Under FFR, landowners with over 500 acres had to submit a Road Maintenance and Abandonment Plan (RMAP) by December 31, 2001. I made up a detailed plan and submitted it on time. Later, some members of Farm Bureau protested loudly, politicians listened, there was some negotiation, and the law was revised. I no longer had to have a detailed RMAP, but since I had already submitted one, I elected to retain it.

In my RMAP, I had proposed to replace the two rusted-out 15 inch culverts on stream #2 with two 24 inch culverts when we logged in 2005. However, in filling out the FPA, I came to a choice of following my RMAP schedule or revising the RMAP to take into account cost-share projects. One of the foresters said it was unlikely I would get by with 24 inch culverts on these streams. Fearing being required to install some elaborate and expensive stream crossing structures, I opted to revise my RMAP and apply for a cost-share project.

I applied for the Family Forest Fish Passage Program (FFP) for the two crossings of stream #2 and three other crossings on streams outside of the harvest area.

All FFP projects must be submitted by June 30. They are then evaluated and ranked by priority and landowners are notified by January of the next year if their project will be funded.

FFP is getting a lot of attention by the agencies involved. No sooner had I submitted my application than I was called for a joint inspection of our sites. The Small Forest Landowner Office Family Fish Passage Program specialist (SFLO FFP specialist) and a WDFW biologist met me. By the time we arrived at the first stream crossing, two local

Conservation District men who had independently heard of our application were already surveying the site. It almost looked like a competition to see who could get there first. Maybe there are some funds available for whoever does the survey. All five of the crossings I had applied for were determined to be fish passage barriers.

Later, the WDFW biologist called to say she would be going up and downstream from the fish passage barriers to look at the habitat. I was unable to accompany her, but found out WDFW had thoroughly checked all the streams, and actually found some small salmonids upstream of the crossing in one. Must not have been that bad a fish passage barrier.

January has passed and I heard nothing, so my projects must have failed to qualify for funding. They will remain under consideration in future years.

It seems a little inconsistent when a stream that requires a no-cut RMZ 210 feet wide (including both sides) all along its length is rated too low priority to justify public funds for repair of a fish passage barrier.

FORESTRY RIPARIAN EASEMENT PROGRAM

I decided it was better to apply under the Forestry Riparian Easement Program (FREP) and receive payment for 50% of the value of the timber in the RMZ in return for an easement encumbrance on the title to the property than to just leave the timber with no compensation. I applied as part of the FPA. The Small Forest Landowner Office forester (SFLO forester) met me on the ground in December and we discussed the situation. Funds had been appropriated by the state legislature. It was also possible I could be reimbursed for the time required to mark the boundaries, do the DFC, etc. since I am a qualified forester.

After we had started logging, I got to thinking about a half-acre strip of timber between the RMZs of the two branches of stream #2. If we logged it, the solid unit of RMZ timber would be broken up and this strip would probably eventually become a vine maple – salmonberry brush patch. There was some financial value there, but the environment would be better if we left it. My question was – if we voluntarily left the half-acre of timber without compensation, would we still be able to get paid (50%) for the RMZ timber? The SFLO forester took a look and said no. The "adjacency" provision requires that the

adjacent timber be cut, or there is no compensation for the RMZ timber. Within a week, the half-acre strip was logged.

The total area clearcut was 51 acres. The RMZ acreage, not counting the outer zone, is 12.5 acres. Logging was completed on October 4 and, in accordance with the FREP instructions, I immediately notified DNR that our harvest was completed. Having heard nothing four months later, I contacted the SFLO forester and asked the status of our FREP application. He responded that I was "on the list". I kind of suspected I was on some kind of DNR list. Now it was confirmed. My consulting forester friend tells me it may take 12-18 months after completion of logging to get paid for the RMZ timber under FREP. I read the whole chapter on FREP in FFR but saw nothing about a waiting list except when funding is not available. There must be a separate set of rules for DNR administration.

SUMMARY

The actual logging went very well. We contracted with a reputable operator, and his employees did a good job. In March of this year, we contracted with another good operator whose employees planted Douglas-fir, hemlock and cedar seedlings on the harvested area. For about half the area, it was the start of the third crop, and for the rest it is the "fourth growth".

I may have trouble accepting the reasoning behind some of FFR, and the fairness of landowners bearing most of the cost, but I tried to follow the rules to the best of my ability. No less than seven agency employees visited our tree farm, some of them more than once. I talked to others on the phone or in person at their office. They were all very professional and helped in any way they could.

Our harvest generated about 1.5 million board feet of logs, including pulpwood. The total annual harvest in Grays Harbor County is about 500 million board feet. If the other landowners took up as much time as I did, agency staff would have to be increased by ten times or more. Now that I have had the experience, I hope to be able to do a better job with less help in the future. Our next harvest is only four years away.

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