

Utah Forest News

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What is a FWQG?

FWQGs are Utah's new Forest Water Quality Guidelines. They are voluntary measures that landowners, loggers, and natural resource professionals can utilize to help protect water quality. The FWQGs were developed through a cooperative effort of the Utah Division of Water Quality and the Division of Forestry, Fire and State Lands, with input from the Forest Stewardship Coordinating Committee, the Utah NonPoint Source Task Force, and the public. The Utah FWQGs have been adopted as part of the state's NonPoint Source Management Plan and approved by EPA. But what does all this mean to the forest landowner?

Forest Water Quality Guidelines are a collection of excellent suggestions for forest landowners looking to implement forest practices, such as timber harvesting, on their lands. The guidelines spell out ways to protect the land, the timber resource, and water quality. FWQGs address issues regarding road construction, timber harvesting, protecting streamside areas, forest regeneration, using prescribed fire, and more. These guidelines can be referenced by landowners in timber sale contracts and agreements with logging contractors to ensure that resource values are protected during and long after forest activities. Landowners may choose to utilize one or two guidelines, or may

find that nearly all the guidelines are important in reaching their management goals. Implementation of the FWQGs is voluntary, but can contribute to the continued productivity and quality of forest lands for generations to come.

Copies of the Silvicultural Addendum to the NonPoint Source Management Plan containing the FWQGs can be obtained by contacting Ed Storey at FF&SL, 801-538-5555 or Rick Summers at the Division of Water Quality, 801-538-6146. The Addendum also can be found on the FF&SL web site at www.nr.state.ut.us/slf/slfhome.htm. In addition to listing the FWQGs, this publication offers comprehensive information on non-voluntary state regulations that need to be followed when implementing forest practices and serves as an excellent reference guide. While the FWQGs are currently only available in this format, a more user-friendly publication and a series of workshops illustrating the principles behind the FWQGs and how to implement them are planned for the Fall of next year. In the mean time, the agencies listed above are available to provide assistance in implementation of the new guidelines. The FWQGs represent a new, valuable tool in the effort to manage forestlands for the continued benefit of landowners and the public as a whole.

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Another “Beetle Invasion”?

If you take a walk through the forests of Utah’s high country, you’ll undoubtedly notice a large number of dead and dying trees. They are the victims of an insect infestation. Many of the trees are of the spruce family and are dying because of a tiny insect known as *Dendroctonus rufipennis*, or spruce beetle.

“It’s a problem throughout most of the state,” says Kelly Allen, Area Manager of the Richfield office of the Division of Forestry, Fire and State Lands. “But there are still many areas where we may be able to prevent the spruce beetle from doing wholesale damage.” One of those areas is Monroe Mountain, 13 miles southeast of Monroe.

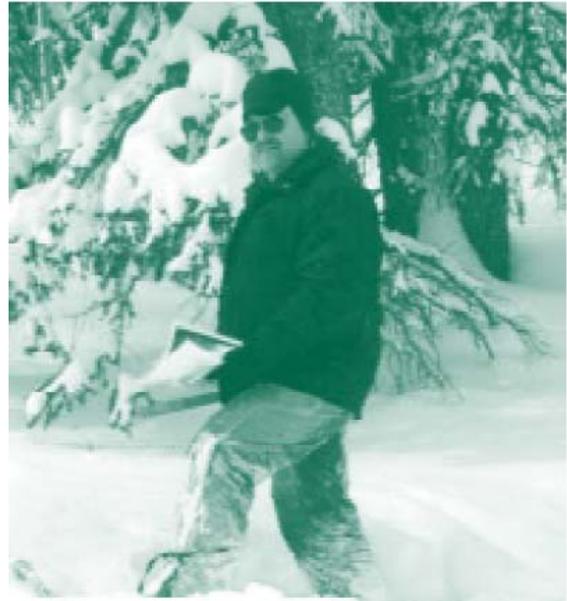
It’s a problem that crosses traditional boundaries. The spruce beetle does not respect property lines dividing national forest from state-owned or private property. That’s why Allen joined a cooperative effort with the U.S. Forest Service Forest Health Protection Ogden Field Office and Fishlake National Forest to survey the risk of infestation on Monroe Mountain.

Allen met with Entomologist John Anhold and Forestry Technician Alan Dymerski of the Ogden Field Office, as well as Supervisor Rob Mrowka, Allen Henningson and Ron Sanden from the Fishlake National Forest to plan the survey. Then for three days in mid-February, a team from FF&SL and USFS set out to snowmobile, snowshoe and cross-country ski the area. Joining Allen from FF&SL were Gary Cornell, Blaine Hamp, Brooke Lee, Colleen Keyes and Vicki Konkol. “It was exhausting work,” according to Allen. “A recent storm had just dumped fresh snow in the area and movement was difficult.” Nevertheless, the team managed to complete about 25 percent of the survey. The remainder of the survey was completed this past summer.

“The spruce beetle is present in the forest all the time, usually inhabiting a small percentage of old or injured trees,” said Allen. “A healthy tree can defend itself against the insect, but prolonged drought, injury, or

old age reduces its ability to fight off the insect. That’s when insect damage can increase to epidemic proportions.”

Initial results from the survey seem to indicate a typical healthy forest population of the insect in the Monroe Mountain area. Should the final results prove otherwise, a choice will have to be made. “There are several ways we can deal with the pest,” explains Allen. “Selective logging and prescribed fire provide the best chance of containing an epidemic. Or we can just let the infestation run its course.” That, says Allen, will mean most of the spruce will end up dead and add to the fire hazard, something he prefers not to see happen in an area honeycombed with private cabins.



Kelly Allen, Central Area Manager, FF&SL, participated as a member of the beetle survey team.

Although the survey data indicate the spruce beetle has not yet infested the private lands that were surveyed, site conditions including aspect, basal area, and stand density are such that a problem could develop. Final analysis of the survey data will indicate the risk to these lands of a spruce beetle attack. Landowners whose property may be affected will be informed

and presented with recommendations for appropriate action to reduce the risk of a future beetle outbreak. Also, the situation will continue to be monitored over the next several years. The Fishlake National Forest is doing several salvage sales in the area to help combat the problem, removing trees that have been infested by beetles on federal lands.

“It’s been a good cooperative exercise with the USFS,” Allen said. “We planned and executed the survey as a team and it went very well. The only thing I can hope for beyond that is that we continue to cooperate and when and if we need to take action, we can do it jointly to the benefit of the land regardless of the landowner.”

Source: Jim Springer, Public Information Specialist, Utah Division of Forestry, Fire and State Lands



Spruce Beetle Monitoring and Suppression Activities

Are you wondering if spruce beetles are a problem in your forest? There are several ways for you to monitor your own lands and keep a lookout for beetle outbreaks. First, look at general stand conditions to estimate the susceptibility of your forest stand. Next, look for physical signs of beetle presence. If beetles are present at problem levels, there are several actions you can take to suppress the beetle population and minimize beetle damage in your forest stand.

The most serious insect pest of Engelmann spruce is the spruce beetle (*Dendroctonus rufipennis*). Usually these beetles are restricted to recently windthrown trees or trees weakened by root disease. However, extensive blowdown, avalanches, earth slides, or harvesting that creates large amounts of untreated slash can rapidly increase beetle populations to outbreak levels.

The susceptibility of a spruce stand to an outbreak

depends on several factors. Location is important. For example, a stand located on a well-drained site in a creek bottom is more susceptible than a stand on a ridge. A dense stand with a high percentage of large diameter spruce will be more susceptible than open stands with smaller spruce and a lower proportion of spruce in the overstory. The reasons for this are that the spruce beetle prefers larger diameter trees (old, weakened, diseased, or fallen trees are especially preferable) with trunks sheltered from the drying heat of the sun.

Indicators of a spruce beetle outbreak include fading crowns and extensive bark sloughing. The bark sloughing is caused by woodpeckers hunting for beetles and is most easily identified in winter months when flakes of bark are scattered on the snow beneath large spruce trees. If you find signs of spruce beetle infestation, mark the affected trees, record their location, and contact a forester or forest entomologist to confirm your suspicions.

Once a large outbreak has begun, there is little that can be done to stop it. The best long-term strategy for reducing the risk of spruce beetle outbreaks is to maintain a vigorous stand and take aggressive action to suppress beetles once a problem has been identified. The best way to achieve a vigorous spruce stand is by thinning the trees to enhance overstory tree vigor and to establish a favorable mix of species in the understory.

An aggressive spruce beetle suppression program involves: 1) detection of infested trees; 2) use of trap trees; and 3) removal or on-site treatment of infested trees. Early and complete detection of infested trees is essential. Because attacks are scattered, it is impractical to closely inspect each tree; but looking for the indicators mentioned can help identify spruce beetle attacks. Again, marking infested trees and recording their location, as well as the location of windthrown trees, will help greatly with suppression efforts. A forester can then confirm the problem and help you determine the best course of action.

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Trap trees generally are an effective method of reducing beetle impacts in a stand. These trees are felled near infested trees to attract beetles as they emerge in the spring or early summer. Emerging beetles, attracted to the felled tree as a brooding site, are thus concentrated. To be effective, trap trees must be large (>14 inches DBH). Select trees with broken tops and evidence of decay over more desirable trees. After beetle flight the trap trees must be treated in the same way as naturally infested trees and windthrow. Typically, trap trees are felled in the autumn and then treated in late summer of the next year. Baited funnel traps to capture emerging adult beetles are another effective suppression tactic.

Infested spruce can be treated in several ways. Logs can be removed from the forest (and away from living spruce trees) or they can be treated on-site. The bark can be completely removed from the logs or the logs can be burned (note that the logs do not need to be completely burned; it is simply necessary to “cook” the larvae just beneath the bark). Alternatively, logs can be cut in short pieces (<16 inches) and rolled into openings where the sun can dry out the phloem and kill the larvae. Typically, spruce beetles spend two summers beneath the bark of their host tree; however, if possible, infested trees should be treated within one year following infestation.

For more information on identifying and treating an outbreak on your property, contact your FF&SL service forester by calling 801-538-5555.

Source: Jim Long, Professor, Department of Forest Resources, Utah State University



Conservation Easements and Forest Legacy

Our farm, ranch, and forest lands are under increasing development pressure, often making opportunities to subdivide and sell lands quite tempting. Landowners interested in keeping their lands in family ownership and preserving their rural, open space values should consider the possibility of putting all or a portion of their holdings in a conservation easement.

Conservation easements are restrictions on the use of lands, voluntarily negotiated between the landowner and a private charitable conservation organization or government agency chosen by the landowner to “hold” the easement. The purpose of a conservation easement is to protect some aspect of the land identified as having significant conservation value. Such values might include wetland areas, important wildlife habitat, areas of unusual beauty or historic value, or simply, open space values.

Conservation easements provide the opportunity to conserve these values while allowing the landowner to retain ownership and pass the land on to his or her heirs. Traditional land uses often are allowed to continue, provided they do not interfere with the conservation objectives identified in the easement. Placing land in an easement also may provide significant tax advantages to the landowner.

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Source: Kevin Wells, Legacy Coordinator, FF&SL

Classifieds

This classified section is intended as a service for forest landowners. Listing of these services, companies, and individuals here in no way implies endorsement by Utah State University Extension. We suggest that you use the same precautions you would use in the purchase or sale of any goods and services, including asking for and checking references and using a written agreement to clarify the obligations and responsibilities involved in a sale or service contract.

Utah Forest Products, Inc. – Looking for saw logs and offering competitive bids on standing timber. All species considered. Complete management proposals offered using best management practices. Contact John Schmidt, Forester, at 435-865-9438 or at our mill in Escalante, 435-826-4521. Please keep Utah forests working for Utah!

Buying Property – Looking to buy mountain property; large acreage; aspen, pine, or sage covered. Please contact Mike at 801-367-2999.

Do you have forest resources you are looking to sell? Are there specific timber resources you are looking to buy? Do you offer services useful to forest landowners? This is the place to advertise your needs! Advertisement is free. If you would like to place an ad, call Lisa Dennis-Perez at 435-797-0560 or e-mail lisadp@ext.usu.edu.

New Stewardship Forester

The Utah Division of Forestry, Fire and State Lands has a new Forest Stewardship Program Coordinator. The position was vacated by Scott Burroughs in the spring of 1998. Ron Gropp was selected to fill the position last July and has been on board since August 10, 1998. Ron's current role as Forest Stewardship Coordinator is to provide direction and leadership to Utah's Cooperative Forestry Assistance Programs, including forest stewardship, agro-forestry, and stewardship incentives programs. However, Ron is not new to the agency. He served as the Utah FF&SL Stewardship Forester for the Southwestern Region, located in Cedar City, for six years. There, he provided assistance to many private forest landowners in the area while administering Utah's forestry programs

Prior to filling his new role this past August, Ron was briefly employed by the Oregon Department of Forestry as a service forester working with small woodland, private landowners, administering cost-share programs including stewardship incentives (SIP), forestry incentives (FIP), and tax incentives programs. Ron received a B.S. in Forestry from the University of Wisconsin-Madison in May 1991. Prior to receiving his degree, Ron spent time as a forest technician in several mid-western and mid-southern states and overseas in Norway, and served as a research assistant with the Department of Forestry at the University of Wisconsin.

Ron's fondness of Utah's many diverse attributes was inevitably what drew him back to the state. If you would like information on Utah's forest stewardship and stewardship incentives programs, you can call Ron at 801-538-5457, or call your local FF&SL service forester.



Forest Taxation: Establishing Cost Basis of Forest Assets

One of the major tax advantages of a timber sale is the ability to offset income from the sale with a portion of the original purchase price of land and timber. Known by the unfortunate term depletion, what the woodland owner is doing is subtracting the cost of timber from the gross sale income to figure profit. When forest owners deplete the cost basis they have tied up in timber, all they are doing is subtracting the original cost of the timber to figure net profit. Depletion is to timber what depreciation is to equipment used in a business. The taxpayer recovers cost as the timber or equipment is used up.

The cost basis of any asset is the sum of its costs up to the present. It is composed of the original cost plus allowable amounts that may have been added to the basis over time, less any amounts that may have been recovered through depreciation or depletion. When an asset is sold, the taxpayer subtracts its current cost basis before figuring gain or loss from the sale.

Although the concept of cost basis is simple, it is not always easy to calculate, especially for timber. Why? Because timber is usually purchased with land, buildings, and other improvements all for one price. Before a woodland owner can recover the cost basis of timber sold, he or she must first determine what portion of the total cost basis of all the assets is attributable to timber. This process is one of making an allocation to different accounts. In the example that follows, the owner has set up two accounts, land and timber. Only that part of the total cost basis that is reasonably and fairly allocated to timber is subject to depletion. Land is never depleted until it is sold outright.

For many woodland owners, the cost basis of land and timber is attributable mostly to the original purchase price of the property. However, carrying charges, such as taxes, interest, and insurance, that were not taken as a deduction in the year they were incurred can be added to the cost basis. Consider the following example and assume there have been no additions to the basis and no deductions up to the current year:

Ms. K acquires 130 acres of forest land in the spring of 1990. She paid \$45,000, or \$350 per acre. An inventory of the timber was completed by a forester in the fall of 1998. He estimated the current inventory to be 456.2 mbf (thousand board feet) and 1,593 cords. He also estimated

average annual growth rate at 2.2 percent. The forester deducted the equivalent of nine years of forest growth (actually nine growing seasons) to arrive at an estimate of the volume when the land was acquired: 375.05 mbf of sawtimber and 1,310 cords of fuel-quality wood.

The value of the timber inventory on the date of purchase: sawtimber = \$31,879 (\$85/mbf), cordwood = \$9,825 (\$7.50/cord). The unit values for sawtimber and cordwood were obtained from information on timber sales in the area in 1990. Total timber value on the date of purchase was \$41,704 (sawtimber + cordwood).

The 1990 fair market value of timber is estimated to be about 92 percent of the total purchase price of land and timber combined. Although this may seem reasonable to the woodland owner, it will not seem reasonable to a revenue agent during an audit. The IRS stipulates that the cost basis of assets must be allocated according to the separate fair market value of each asset independent of the other, and bare land never has a value of zero or less.

Ms. K investigates the value of her land as bare, cutover property. After much prodding on her part, she finally obtains a realtor's estimate of what her land would have sold for in 1990 without the timber on it. The realtor believes the property might have brought \$90 per acre for the tract as bare, cutover land. The fair market value of bare land is \$11,700 (130 acres times \$90/acre). She has a letter to this effect on the realtor's stationery to document and defend the fair market value of bare land.

With information on the fair market value of each asset (independent of the other), she can allocate her cost basis to the land and timber accounts as shown in Table 2. It is important to remember that cost basis is the amount of money that an owner has in the asset, not the current fair market value.

Table 2. Allocation of Cost Basis to Land and Timber Accounts

Asset	Fair Market Value	% of FMV	Cost Basis
Land	\$11,700	22	\$10,010
Timber	\$41,704	78	\$35,490
Total	\$53,404	100	\$45,500

*Note: The allocation of \$35,490 to the timber account is based on Ms. K's calculations that 78% of the total fair market value of land and timber is attributable to timber – \$45,500 * 0.78. The balance of purchase price is attributable to bare land – \$45,500 * 0.22.*

Once the allocation to separate land and timber accounts has been made, the timber account can be further divided into subaccounts for regeneration, young growth, or other product categories. This is especially important if and when Ms. K decides to sell timber. She can create as many subaccounts as she likes, but in this example she sets up two – sawtimber and cordwood. Again, she allocates timber cost basis according to the separate 1990 fair market value of each asset, but divides the cost basis for the asset by its current (1998) inventory to obtain the “unit basis for depletion,” as shown in Table 3. In this example, for every thousand board feet Ms. K sells in 1998, she can deduct \$59.12 from gross sale income.

Table 3. Allocation of 1998 Timber Cost Basis to Subaccounts

Asset	FMV	% of FMV	Cost Basis	Unit Basis for Depletion
Sawtimber	\$31,879	76	\$26,972	\$59.12/mbf
Cordwood	\$9,825	24	\$8,518	\$5.35/cord
Total	\$41,704	100	\$35,490	

Note: The allocation of timber cost basis to product subaccounts is handled in the same fashion as the original allocation that created the bare land and timber accounts. In this example, it is the separate fair market value of sawtimber and cordwood on the date of acquisition that is used to make the allocation to timber and cordwood subaccounts. The unit basis for depletion is the total in each subaccount divided by the current inventory of the asset. For sawtimber, it is \$26,972 divided by 456.2 mbf = the 1998 inventory.

In future timber sales, Ms. K must recalculate the unit basis for depletion by completing an inventory before the sale, or by growing the residual inventory by the average annual growth rate. Whatever basis is available at that time is divided by inventory to calculate the unit basis for depletion. Because forest stands grow (while the cost basis of assets usually stays the same or shrinks as basis is recovered during timber sales), the unit basis for depletion gets smaller and smaller with each succeeding sale. The only time it ever reaches zero is if the entire inventory is sold, or if land and timber are sold outright.

Now consider the following scenario:

Ms. K decides to sell timber in 1998. Her forester has completed a presale inventory and discounted the current inventory for nine growing seasons at an average annual growth rate of 2.2 percent. With these

data, and with the information on timber prices and cutover forest land prices in 1990, he helps Ms. K allocate the original purchase price to separate land and timber accounts. He takes the cost basis attributable to timber and figures the unit basis for depletion available in 1998.

In the fall of 1998, Ms. K and her forester implement a “timber stand improvement” prescription across the entire property that yields 149.5 mbf of sawtimber and 455 cords of fuelwood. They use a “lump-sum” timber sale method, and receive \$85 per thousand board feet of sawtimber and \$10 per cord of fuelwood. The other facts of the sale are as follows:

Gross Sale Income	\$17,257.50
Sale Expenses	\$1,800.00 Forester Fees
	\$80.00 Phone Calls
	\$175.30 Travel Expenses
	\$250.00 Lawyer Fees
Total	\$2,305.30

Depletion Allowance for Timber:

Harvest Volumes * 1998 Unit Basis for Depletion = DA	
149.5 mbf * \$59.12/mbf = \$8,838.44	
455 cords * \$5.35/cd = \$2,434.25	
Total	\$11,272.69

Figure Long-Term Capital Gain:

$$\text{Gross Income} - \text{Sale Expenses} - \text{Depletion Allowance} = \text{LTCG}$$

$$\$17,257.50 - \$2,305.30 - \$11,272.69 = \$3,679.51$$

Calculating the cost basis of her assets has definite advantages for Ms. K. The long-term capital gain from her timber sale that is subject to taxes was reduced substantially by subtracting the depletion allowance.

If you have questions concerning capital gains, cost basis, or other forest taxation issues, come to the Forest Taxation and Estate Planning Conference to be held January 26-27, 1999 at the Comfort Suites Hotel in Ogden, Utah. The conference will address these issues and many more and is intended for forest landowners and the attorneys, accountants, and resource professionals who assist them. The Utah Division of Forestry, Fire and State Lands and Utah State University Extension are cohosting the event. For more information, see the enclosed flyer or contact Hope Bragg at 435-797-4056 or hopeb@ext.usu.edu.

Source: Excerpted from Chapter 8, Forest Taxation, in “Legal Aspects of Owning and Managing Woodlands,” by Thom J. McEvoy, published by Island Press, Washington, DC and Covelo, CA, 1998

Upcoming Events

Utah Farm Bureau Annual Conference:

-November 16-20, 1998 at the Marriott Hotel
in Salt Lake City, Utah

Call 801-233-3000 for more information.

Forest Taxation and Estate Planning Conference:

-January 26-27, 1999 at the Comfort
Suites Hotel in Ogden, Utah

Call 435-797-0560 or 801-538-5504 for information

Chain Saw Workshop for Arborists:

-February 9-10, 1999 at the DNR offices in
Salt Lake City, Utah

*Call the Lone Peak Conservation Center at
801-571-0900 for more information*

For More Information...

On upcoming events or any of the information presented in this newsletter, please call Lisa Dennis-Perez at Utah State University at 435-797-0560.

State of Utah Division of Forestry, Fire, and State Lands (DFFSL) Service Foresters for your area can be contacted by calling the main office in Salt Lake City at 801-538-5555.

Ideas and
written contributions to
this newsletter are encouraged. Send your
comments to the return address below or call
435-797-0560. NEXT DEADLINE:

January 9th

Non-Profit Org.
U.S. Postage Paid
Logan, Utah
Permit No. 1

Private Forest Landowner Education Program
College of Natural Resources
5215 Old Main Hill
Logan, Utah 84322-5215

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