

# Forest Products Modernization: Innovation Underway

## Using Designation by Prescription on the Colville National Forest

The Colville National Forest in Washington began using Designation by Prescription (DxP) in 2009 in order to become more efficient in timber sale preparation. Marking individual trees with paint in a sale area can be a time-consuming and costly process. DxP saves time preparing a timber sale and money spent on paint by allowing the logger to select which trees to harvest based on a timber stand prescription, which defines the desired condition after harvest.

To start, the forest worked with local industry representatives to determine whether DxP was implementable and that the new method would be feasible. These discussions raised the concern that complex prescriptions could potentially be a burden on the operators. So in units where a simple prescription could be applied to achieve the outcome, the forest went forward with DxP.

Through close working partnerships, both the forest and industry adapted to the process. Contractors now have the necessary expertise and understand measurements such as basal area to maintain proper tree density per acre. In traditional sales, the operator needs only to cut or leave the painted trees depending on how trees are designated to be removed. With DxP, the operator may need to know tree species, how to measure tree diameters, forest health indicators, or how to achieve desired stocking level. This has the potential to initially slow operations. However, the flexibility that DxP provides (the contractor needs only to meet the prescription and that outcome can be accomplished in different ways) can create efficiencies for both the USDA Forest Service and the contractor, such as not having to mark trees for removal in skid trails, no additional volume removal measurements for sale administrators, and potentially removing the need to call sale administration to cut operational trees as long as the prescription is still met.

### Ingredients for Success

Involvement of local industry from the beginning idea of DxP established trusting partnerships and paved the way for the current success of the DxP program. Although some of the forest's workload shifted from marking trees to inspecting the contractor's work, the overall cost to the forest has decreased.

*DxP during harvest operation on the Colville National Forest.  
Forest Service photo by Reese Bennett.*

Potential benefits of DxP include:

- Decreased paint and labor costs.
- Time saved on getting sales advertised.
- Increased capacity to meet targets by offering more acres treated by volume in a year.
- Decreased number of painted trees in recreational areas enhances visual and recreational experiences.

Introduction of DxP has been an evolutionary process for both the forest and the contractors. Working and evolving together through good communication has been the ingredient for success.

### Lessons Learned

Plan to spend more time with purchasers or contractors new to DxP. It is a learning process that requires collaboration until both the forest and purchasers have experience and feel comfortable using it.

A forester must know how to write a prescription for DxP so that it can be implemented. The wording in a contract with DxP is very important; one word can be the difference between success and failure. Contract modifications can be costly.

### Next Steps

The Forest Service is developing and piloting use of digital prescription guides that will aid operators in implementing DxP. Instead of a small, bulleted document in his or her pocket, the operator would have a tablet in the cab with access to the prescription and a sale area map with GPS points. The map would indicate where the operator is in the sale unit and include polygons with prescriptions for that area. This digital technology could ease the implementation of DxP further and add more variability in prescriptions used.

### For More Information, Contact:

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