

Desired Future Condition Worksheet

Users Guide for Version 1.1.12

June 7, 2001

GETTING STARTED:

The Desired Future Condition (DFC) Worksheet can be downloaded from the DNR Internet Web site. From the Forest Practices Forms & Instructions web page located at:

www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_forms.aspx

Scroll down and click on "Desired Future Condition Worksheet (DFC)". When prompted, click "Save" and save the file in a familiar location on your computer. After you have saved it, double-click on the DFC.exe file icon and when prompted, select "browse" and choose a location to extract the following four DFC files:

1. readme.txt : containing installation instructions
2. setup.lst : needed for installation
3. setup.exe : the installation program
4. dfc.cab : the Desired Future Condition Worksheet

Once the four files are extracted from DFC.exe, double-click on "setup.exe" to install the DFC Worksheet program.

Note: Before installing the current version of the DFC Worksheet, uninstall any older versions. (From the Start menu, choose Settings, then Control Panel. In Control Panel, double-click on Add/Remove Programs and follow instructions for uninstalling "Desired Future Condition Worksheet".)

I. INPUT

1. Harvester and Unit information
2. Stream Size

Westside: Choose "Large" if bankfull width is greater than 10 ft. or "Small" if bankfull width is less than or equal to 10ft.

Eastside: Choose "Large" if bankfull width is greater than 15 ft. or "Small" if bankfull width is less than or equal to 15 ft.

3. Site Class (I, II, III, IV, V)
4. Major Species (Douglas fir or Hemlock)
5. Length of RMZ (length in feet of the RMZ, or portion of the RMZ, being evaluated)
6. Eastside High Elevation RMZ (check this box only if stand is an Eastern Washington High Elevation timber habitat type (above 5000 ft.))
7. Stand Age (separately for the Core and Inner Zones)
8. Number of d.b.h. classes (separately for the Core and Inner Zones)
9. Stand Tables for both conifer and hardwood; and separately for the core and inner zones. Value entered for D.B.H. Class should be the median D.B.H. for that class.
10. Confirm that the Inner Zone Cruise Strip width is as shown in the table shown in Appendix A. of this guide.

Important Notes:

1. Must enter the diameter classes in order from smallest to largest.
2. Click on the "Calc" buttons for each zone (verify computation of the stand data) every time there is a change in any value in the stand tables.
3. Verify that the "Widest Inner Zone Width" is in fact the same as the width of Cruise strip that was used in the field.
4. Observe the Projected Basal Area at age 140 as % of DFC....if these numbers for the core and inner zones are 100% or less no harvest will be allowed.

II. EVALUATING OPTIONS

1. Click on the appropriate tab to select an option

A. Option 2 Extended harvest zone

Note: Option 2 is not available for Eastern Washington High Elevation timber habitat type (above 5000 ft.) stands.

1. The displayed graphic presents the prescription for the RMZ
 - a. The widths of each zone are shown in boxes at the edge of each zone
 - b. For the inner zone either a "no harvest message" or a " basal area credit " message will be presented..... the basal area credit is total sq ft for the zone. (This **is not** a per acre number)
 - c. the appropriate floor zone width will be displayed, if a floor is applicable.
 - d. the number of riparian leave trees which must be left between the floor and the outer edge of the inner zone will be displayed. (This **is not** a per acre number)
 - e. In the outer zone a message will be displayed which describes the standard number of riparian leave trees which must be left and the options for reducing this number.

Taking Credit for excess basal area inside the floor:

Assume the inner zone displays " Credit for 20 sq ft of basal area is available for outer zone and

Assume that the outer zone is composed of well spaced 24" + trees. A 24" tree has a basal area of 3.14 sq. ft. ...

Assume that the work sheet calls for leaving 20 trees unless there is credit from the inner zone in which case the outer zone trees could be reduced to 10 trees.... With a credit of 20 sq ft and trees having 3.14 sq ft each the reduction in the outer zone will be $20/3.14 = 6$ trees (6.37)

NOTICE: THE RMZ PRESCRIPTION PRESENTED BY THIS SOFTWARE ASSUMES UNIFORM DISTRIBUTION OF TREES THROUGHOUT THE INNER ZONE.

B. Option 1 Thinning from below

1. The graphic displayed presents a worksheet which is used to compute the prescription.

a. The inner zone stand table presents the original stand table data plus "after thinning" data which can be modified by the operator to simulate a proposed thinning. The program will compute a suggested thinning when the operator clicks on the "suggest thinning".

b. Important to get a credible thinning option the operator must click on the "Suggest Thinning" button or enter proposed "after thinning" numbers of trees for each diameter class.

c. The "suggest thinning" button assumes that the operator wants to cut all hardwood..... because this will give the greatest flexibility in the thinning option.

d. The program will notify the operator if the proposed thinning violates the minimum tree per acre requirement or the % conifer constraint. This is accomplished by turning the Trees per Acre (conifer) cell or the Minimum % conifer cell red if a violation occurs.

e. If the operator tries to leave the Thinning worksheet (click out to another worksheet) when an unacceptable thinning regime is being proposed the program will display an error message.

f. The Option 1 graphic displays the zone widths in boxes at the edges of each zone.

g. Text messages are presented in the inner zone and outer zone which describe the allowed prescriptions for those zones.

h. In the inner zone if thinning is allowed the text will tell the operator the number of trees that must be left on the ground in order to meet the stand requirements. (This **is not** a per acre number) The After thinning stand table will show the actual numbers of trees by diameter class that must be left in the zone.

i. In the outer zone the text will display the actual number of riparian trees that must be left in the zone (this **is not** a per acre number)

j. The process for getting credit for trees left in the CMZ is detailed in the Board Manual. Where conifer is involved it is a straight sq ft basal area for sq ft basal area trade.. Where alder in the CMZ is traded for alder in the outer zone it is also a straight sq ft for sq ft trade... where alder in the CMZ is traded for conifer in the outer

zone the trade is 3sqft of alder for each sq ft of conifer basal area in the outer zone

III. PRINTING THE DOCUMENTATION

1. When you have evaluated the options and want to produce the documentation required to complete your forest practices application Click on the Worksheet tab..... then click on the File button at the top of the page ... then click on the print button... The program will print three pages containing your input data and the riparian prescriptions for Option 1 and Option 2. The pages will be attached to your FPA .

IV. SAVING AND OPENING YOUR WORKSHEETS

1. To save data entered in the stand tables.... Click on the Worksheet tab, then click on the File button at the top of the page, then click on Save. Enter a file name, then click on the save button.

2. To retrieve a worksheet, Click on the Worksheet tab, then click on the File button at the top of the page, then click on Open. Enter the name of the file you want to retrieve, or just click on the file from the list of files in the Open window. Note: You must reselect major species and then click on both the Core Zone and Inner Zone "Calc" buttons to establish valid values for the current worksheet session.

Appendix A.

WIDTHS (in feet) OF INNER ZONE CRUISE STRIPS FOR WESTSIDE TYPE 1, 2, AND 3 STREAMS

SITE CLASS	SMALL STREAM SIZE	LARGE STREAM SIZE
I	84	100
II	64	78
III	44	55
IV	23	33
V	10	18

The DFC Software computations assume that the Inner Zone cruise strip widths shown in the above table were used to collect the field data entered in the Inner Zone Stand Table. This is necessary because there are two possible Inner Zone Widths depending upon which Management Option is ultimately chosen by the landowner. Therefore to insure that the field data is collected in such a way as to cover either alternative the widest Inner Zone width must be used as the Inner Zone Cruise Strip.

Appendix B.

Desired Future Condition Installation Instructions:

1. First, uninstall any older versions of the DFC software: From the Start menu, choose Settings, then Control Panel. In Control Panel, double-click on Add/Remove Programs and follow instructions for uninstalling "Desired Future Condition Worksheet".
2. There are 4 files in the DFC.EXE file needed to install the Desired Future Condition Worksheet.

1. readme.txt
2. setup.lst
3. setup.exe
4. dfc.cab

Place all four files in your "c:\temp" directory, or any other directory of your choosing. Whatever you do, make sure all four files are in exactly the same directory.

Then, having done that, run the setup program from the directory where you put the four files. You can run the setup program by simply double-clicking on the "setup.exe" as listed in windows explorer, or file manager, or, from the Start menu, choose Run, and select setup.exe.

3. To run the DFC Worksheet: From the Start menu, go to Run, navigate to Program Files and select DFC.