

# Appendix A. Model Runs Workbook - 50 Years

## Cherokee NF Ecological Forecasts -- 20 & 50 Years

| Ecological System               | Acres (rounded to nearest 100) | Ecological Departure |          |
|---------------------------------|--------------------------------|----------------------|----------|
|                                 |                                | U-B-Gone Mgmt        |          |
|                                 |                                | 20 Years             | 50 Years |
| Cove Forest                     | 103,000                        | 30                   | 18       |
| Dry Oak Forest                  | 65,900                         | 37                   | 29       |
| Dry-Mesic Oak Forest            | 40,800                         | 34                   | 33       |
| Low-Elevation Pine Forest       | 23,800                         | 35                   | 21       |
| Montane Pine Forest             | 21,800                         | 35                   | 22       |
| Montane Red-Chestnut Oak Forest | 71,800                         | 25                   | 11       |
| Northern Hardwood Forest        | 11,600                         | -                    | -        |
| Riparian & Floodplain Systems   | 2,500                          | -                    | 21       |
| Spruce-Fir Forest               | 2,200                          | 24                   | 11       |

## Cherokee NF Ecological Forecasts -- 50 Years

*Model Runs - August, 2011*

| Ecological System                 | Acres<br>(rounded to<br>nearest 100) | Ecological Departure  |                                | U-B-Gone<br>Mgmt -<br>Ave. Annual<br>Cost over 50<br>Years |
|-----------------------------------|--------------------------------------|-----------------------|--------------------------------|--|
|                                   |                                      | No Mgmt -<br>50 Years | U-B-Gone<br>Mgmt - 50<br>Years |  |
| Cove Forest                       | 103,000                              | 24                    | 18                             | \$ 22,500  |
| Dry Oak Forest                    | 65,900                               | 58                    | 29                             | \$ 104,540   |
| Dry-Mesic Oak Forest              | 40,800                               | 59                    | 33                             | \$ 31,180  |
| Low-Elevation Pine Forest         | 23,800                               | 65                    | 21                             | \$ 67,950  |
| Montane Pine Forest               | 21,800                               | 83                    | 22                             | \$ 111,600   |
| Montane Red-Chestnut Oak Forest   | 71,800                               | 40                    | 11                             | \$ 64,220  |
| Northern Hardwood Forest          | 11,600                               | 12                    | -                              |  |
| Riparian & Floodplain Systems     | 2,500                                | 22                    | 21                             | \$ -   |
| Spruce-Fir Forest                 | 2,200                                | 39                    | 11                             | \$ 4,800   |
| Average Annual Cost over 50 Years |                                      |                       |                                | \$ 407,000   |

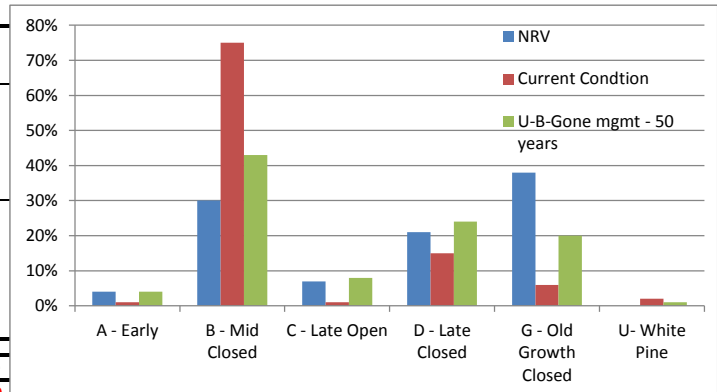
Strategy Worksheet

**Cove Forest**

102,977 acres

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 4%  | 1%                | 3%                 | 4%                  | 4%                       |   |   |
| B - Mid Closed  | 30% | 75%               | 43%                | 45%                 | 43%                      |   |   |
| C - Late Open   | 7%  | 1%                | 3%                 | 8%                  | 8%                       |   |   |
| D - Late Closed   | 21% | 15%               | 30%                | 27%                 | 24%                      |   |   |
| G - Old Growth Closed   | 38% | 6%                | 19%                | 17%                 | 20%                      |   |   |
| x U- White Pine   |     | 2%                | 2%                 | 0%                  | 1%                       |   |   |



Ecological Departure

|    |    |    |    |   |   |
|----|----|----|----|---|---|
| 47 | 24 | 21 | 18 | - | - |
|----|----|----|----|---|---|

Uncharacteristic Classes

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 2 | 2 | 0 | 1 | 0 | 0 |
|---|---|---|---|---|---|

Total Cost

|      |              |              |      |      |      |
|------|--------------|--------------|------|------|------|
| \$ - | \$ 1,440,000 | \$ 1,125,000 | \$ - | \$ - | \$ - |
|------|--------------|--------------|------|------|------|

ROI (vs. Min. Mgmt)

|     |     |   |   |   |   |
|-----|-----|---|---|---|---|
| 0.3 | 0.6 | - | - | - | - |
|-----|-----|---|---|---|---|

| Scenarios (enter name below) | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |   |   |  |  |  |  |
|------------------------------|-------------|--|---|---|--|--|--|--|
|                              | Notes       | Gap Harvest + Thinning (comm)  | Harvest-Restore + Plant (comm) - 1st 20 yrs | Harvest-Restore + Plant (comm) - 2nd 30 yrs |  |  |  |  |
| No mgmt - 50 years           |             |  |   |   |  |  |  |  |
| Max mgmt - 50 years          |             | 200  | 200   | 0   |  |  |  |  |
| U-B-Gone mgmt - 50 years     |             | 200  | 50  | 50  |  |  |  |  |
|                              |             |  |   |   |  |  |  |  |
|                              |             |  |   |   |  |  |  |  |
| Cost of Strategy (per acre)  |             | \$ 60  | \$ 210                                      | \$ 210                                      |  |  |  |  |
| Number of Years              |             | 50   | 20  | 30  |  |  |  |  |

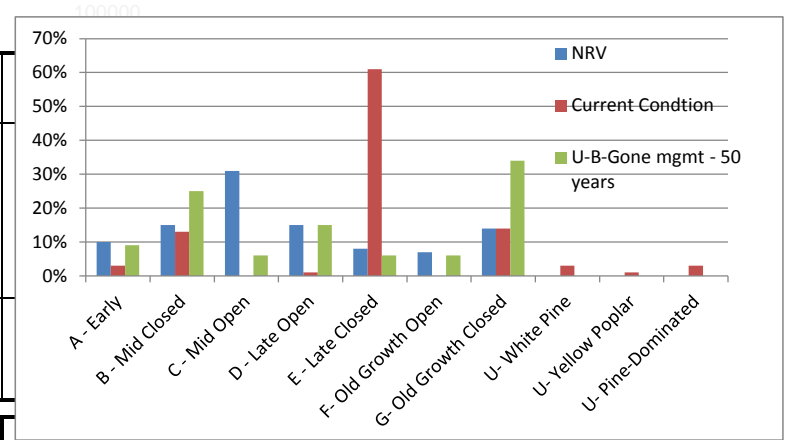
Strategy Worksheet

Dry Oak Forest

65,881 acres

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 10% | 3%                | 3%                 | 11%                 | 9%                       |   |   |
| B - Mid Closed  | 15% | 13%               | 12%                | 30%                 | 25%                      |   |   |
| C - Mid Open  | 31% | 0%                | 1%                 | 12%                 | 6%                       |   |   |
| D - Late Open   | 15% | 1%                | 4%                 | 18%                 | 15%                      |   |   |
| E - Late Closed   | 8%  | 61%               | 10%                | 0%                  | 6%                       |   |   |
| F - Old Growth Open   | 7%  | 0%                | 0%                 | 10%                 | 6%                       |   |   |
| G - Old Growth Closed   | 14% | 14%               | 57%                | 19%                 | 34%                      |   |   |
| <input checked="" type="checkbox"/> U- White Pine                     |     | 3%                | 6%                 | 0%                  | 0%                       |   |   |
| <input checked="" type="checkbox"/> U- Yellow Poplar                  |     | 1%                | 3%                 | 0%                  | 0%                       |   |   |
| <input checked="" type="checkbox"/> U- Pine-Dominated                 |     | 3%                | 3%                 | 0%                  | 0%                       |   |   |



Ecological Departure

Uncharacteristic Classes

|    |    |    |    |   |   |
|----|----|----|----|---|---|
| 61 | 58 | 27 | 29 | - | - |
| 7  | 12 | 0  | 0  | 0 | 0 |

Total Cost \$ - \$ 9,540,000 \$ 5,227,000 \$ - \$ - \$ - \$ -

ROI (vs. Min. Mgmt) 0.5 0.8 - - - -

| Scenarios (enter name below) | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |               |                                |                                       |                                      |   |   |
|------------------------------|-------------|--|---------------|--------------------------------|---------------------------------------|--------------------------------------|---|---|
|                              |             | RxFire   | Rx-Fire-WP/YP | Regen Harvest (50-50 comm/non) | Woodland Restoration (50-50 comm/non) | Harvest-Restore w oak ovrstry (comm) | Harvest-Restore + Plant (comm) - 1st 20 yrs | Harvest-Restore + Plant (comm) - 2nd 30 yrs |
| No mgmt - 50 years           |             |  |               |                                |                                       |                                      |   |   |
| Max mgmt - 50 years          |             | 1600   | 0             | 300                            | 600                                   | 80                                   | 200   | 0   |
| U-B-Gone mgmt - 50 years     |             | 800  | 40            | 150                            | 300                                   | 40                                   | 110   | 50  |
| Cost of Strategy (per acre)  |             | \$ 50  | \$ 50         | \$ 100                         | \$ 100                                | \$ 50                                | \$ 210                                      | \$ 210                                      |
| Number of Years              |             | 50   | 50            | 50                             | 50                                    | 50                                   | 20  | 30  |

Strategy Worksheet

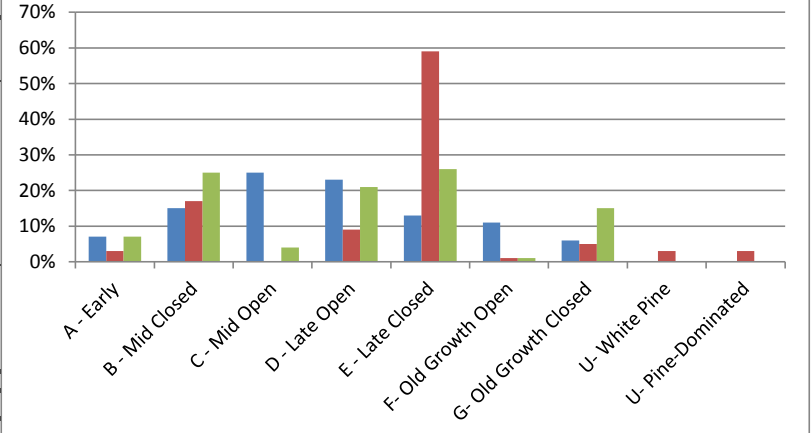
**Dry-Mesic Oak Forest**

40,766 acres

100000

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|
| A - Early   | 7%  | 3%                | 2%                 | 9%                  | 7%                       |   |
| B - Mid Closed  | 15% | 17%               | 14%                | 25%                 | 25%                      |   |
| C - Mid Open  | 25% | 0%                | 1%                 | 8%                  | 4%                       |   |
| D - Late Open   | 23% | 9%                | 5%                 | 22%                 | 21%                      |   |
| E - Late Closed   | 13% | 59%               | 48%                | 22%                 | 26%                      |   |
| F - Old Growth Open   | 11% | 1%                | 0%                 | 4%                  | 1%                       |   |
| G - Old Growth Closed   | 6%  | 5%                | 21%                | 10%                 | 15%                      |   |
| x U- White Pine   |     | 3%                | 5%                 | 0%                  | 0%                       |   |
| x U- Pine-Dominated   |     | 3%                | 3%                 | 0%                  | 0%                       |   |



Ecological Departure

Uncharacteristic Classes

|    |    |    |    |   |
|----|----|----|----|---|
| 54 | 59 | 25 | 33 | - |
| 6  | 8  | 0  | 0  | 0 |

|                     |      |              |              |      |      |      |
|---------------------|------|--------------|--------------|------|------|------|
| Total Cost          | \$ - | \$ 3,088,000 | \$ 1,559,000 | \$ - | \$ - | \$ - |
| ROI (vs. Min. Mgmt) | 1.4  | 2.2          | -            | -    | -    | -    |

| Scenarios (enter name below)    | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |                               |                      |                                     |   |   |        |
|---------------------------------|-------------|--|-------------------------------|----------------------|-------------------------------------|---|---|--------|
|                                 | RxFire      | Thinning (comm) - first 40 yrs   | Thinning (comm) - last 10 yrs | Regen Harvest (comm) | Harvest-Restore w oak ovstry (comm) | Harvest-Restore + Plant (comm) - 1st 20 yrs | Harvest-Restore + Plant (comm) - 2nd 30 yrs |        |
| <b>No mgmt - 50 years</b>       |             |  |                               |                      |                                     |   |   |        |
| <b>Max mgmt - 50 years</b>      |             | 650  | 250                           | 50                   | 100                                 | 40  | 140   | 0      |
| <b>U-B-Gone mgmt - 50 years</b> |             | 200  | 100                           | 220                  | 100                                 | 40  | 50  | 30     |
| Cost of Strategy (per acre)     |             | \$ 50  | \$ 50                         | \$ 50                | \$ 50                               | \$ 50                                       | \$ 210                                      | \$ 210 |
| Number of Years                 |             | 50   | 40                            | 10                   | 50                                  | 50  | 20  | 30     |

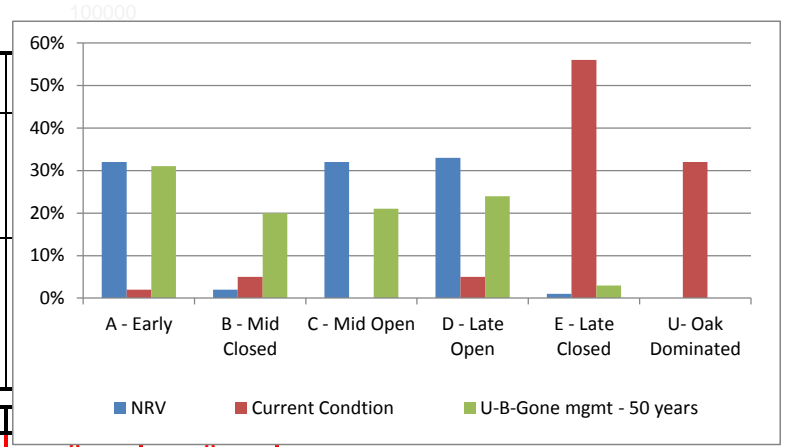
Strategy Worksheet

**Low-Elevation Pine Forest**

23,812 acres

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 32% | 2%                | 13%                | 33%                 | 31%                      |   |   |
| B - Mid Closed  | 2%  | 5%                | 21%                | 22%                 | 20%                      |   |   |
| C - Mid Open  | 32% | 0%                | 11%                | 20%                 | 21%                      |   |   |
| D - Late Open   | 33% | 5%                | 8%                 | 24%                 | 24%                      |   |   |
| E - Late Closed   | 1%  | 56%               | 10%                | 1%                  | 3%                       |   |   |
| <b>x U- Oak Dominated</b>   |     | 32%               | 37%                | 0%                  | 0%                       |   |   |



Ecological Departure

Uncharacteristic Classes

|    |    |    |    |   |   |
|----|----|----|----|---|---|
| 90 | 65 | 21 | 21 | - | - |
| 32 | 37 | 0  | 0  | 0 | 0 |

|                     |      |              |             |      |      |      |      |
|---------------------|------|--------------|-------------|------|------|------|------|
| Total Cost          | \$ - | \$17,400,000 | \$3,397,500 | \$ - | \$ - | \$ - | \$ - |
| ROI (vs. Min. Mgmt) |      | 0.5          | 2.4         | -    | -    | -    | -    |

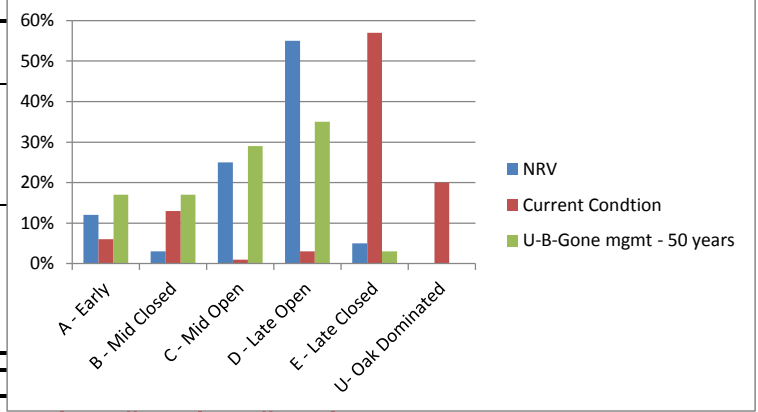
| Scenarios (enter name below)    | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |                              |          |  |  |   |   |             |
|---------------------------------|-------------|--|------------------------------|----------|--|--|---|---|-------------|
|                                 |             | RxFire - Years 1-5   | RxFire - Years 21-25 & 46-50 | Thinning | Woodland Restoration [50% seed source] (comm) - 1st 20 yrs | Woodland Restoration [50% seed source] (comm) - 2nd 30 yrs | Restoration Harvest + Pine Planting (no seed source) - 1st 20 yrs | Restoration Harvest + Pine Planting (no seed source) - 2nd 30 yrs | Fire Breaks |
| <b>No mgmt - 50 years</b>       |             |  |                              |          |  |  |   |   |             |
| <b>Max mgmt - 50 years</b>      |             | 1500   | 1500                         | 140      | 225  | 0  | 225   | 0   | 175         |
| <b>U-B-Gone mgmt - 50 years</b> |             | 1500   | 1500                         | 25       | 225  | 75   | 60  | 25  | 10          |
|                                 |             |  |                              |          |  |  |   |   |             |
|                                 |             |  |                              |          |  |  |   |   |             |
| Cost of Strategy (per acre)     |             | \$ 50  | \$ 50                        | \$ 600   | \$ 50  | \$ 50  | \$ 300  | \$ 300  | \$ 1,200    |
| Number of Years                 |             | 5  | 10                           | 50       | 20   | 30   | 20  | 30  | 50          |

**Strategy Worksheet**

**Montane Pine Forest**

21,837 acres

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 12% | 6%                | 2%                 | 7%                  | 17%                      |   |   |
| B - Mid Closed  | 3%  | 13%               | 13%                | 23%                 | 17%                      |   |   |
| C - Mid Open  | 25% | 1%                | 2%                 | 26%                 | 29%                      |   |   |
| D - Late Open   | 55% | 3%                | 5%                 | 40%                 | 35%                      |   |   |
| E - Late Closed   | 5%  | 57%               | 48%                | 4%                  | 3%                       |   |   |
| <b>x U- Oak Dominated</b>   |     | 20%               | 30%                | 0%                  | 0%                       |   |   |



**Ecological Departure**

**Uncharacteristic Classes**

|    |    |    |    |   |   |
|----|----|----|----|---|---|
| 82 | 83 | 21 | 22 | - | - |
| 20 | 30 | 0  | 0  | 0 | 0 |

|                     |      |               |              |      |      |      |      |
|---------------------|------|---------------|--------------|------|------|------|------|
| Total Cost          | \$ - | \$ 10,340,000 | \$ 5,580,000 | \$ - | \$ - | \$ - | \$ - |
| ROI (vs. Min. Mgmt) |      | 0.9           | 1.6          | -    | -    | -    | -    |

| Scenarios (enter name below)    | Enter Notes                                     | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |  |  |                                    |                           |  |  |                             |
|---------------------------------|---|--|--|--|------------------------------------|---------------------------|--|--|-----------------------------|
|                                 |   | RxFire - yrs 1-5   | RxFire 500 ac/yr & Maintenance Fire 800 acres/yr last 30 yrs | RxFire-Oak (30% seed source) - 100 acres yrs 1-20; then 50 ac/yr | Thin B to C yrs 1-10 and yrs 41-50 | Thinning E to D - yrs 1-5 | Restoration Treatmt w Seed Source (30% of OD) - 20 yrs | Restoration Harvest + Pine Planting - 20 yrs | Thinning E to D - yrs 41-50 |
| <b>No mgmt - 50 years</b>       |   |  |  |  |                                    |                           |  |  |                             |
| <b>Max mgmt - 50 years</b>      |   | 2500   | 800  | 70   | 300                                | 1000                      | 0  | 300  | 500                         |
| <b>U-B-Gone mgmt - 50 years</b> | added fire last 30 yrs and thinning last 10 yrs | 2500   | 1300   | 70   | 250                                |                           | 100  | 80   | 250                         |
|                                 |   |  |  |  |                                    |                           |  |  |                             |
|                                 |   |  |  |  |                                    |                           |  |  |                             |
|                                 |   |  |  |  |                                    |                           |  |  |                             |
| Cost of Strategy (per acre)     |   | \$ 50  | \$ 50  | \$ 50  | \$ 90                              | \$ 600                    | \$ 200   | \$ 300                                       | \$ 600                      |
| Number of Years                 |   | 5  | 30   | 50   | 20                                 | 5                         | 20   | 20   | 10                          |

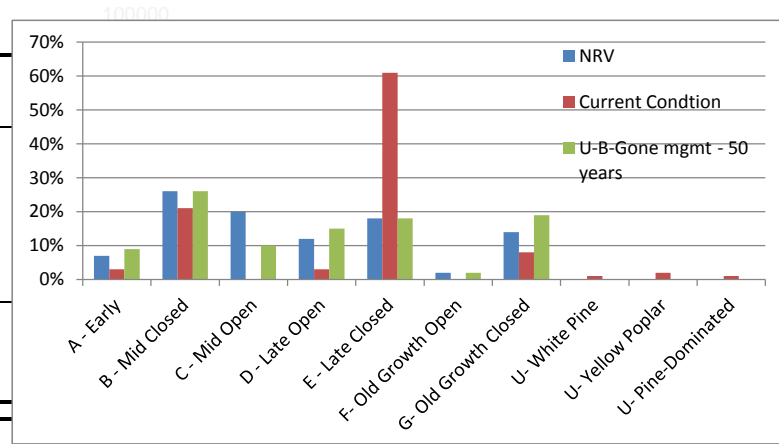
Strategy Worksheet

**Montane Red-Chestnut Oak Forest**

71,847 acres

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 7%  | 3%                | 2%                 | 9%                  | 9%                       |   |   |
| B - Mid Closed  | 26% | 21%               | 23%                | 27%                 | 26%                      |   |   |
| C - Mid Open  | 20% | 0%                | 1%                 | 13%                 | 10%                      |   |   |
| D - Late Open   | 12% | 3%                | 2%                 | 14%                 | 15%                      |   |   |
| E - Late Closed   | 18% | 61%               | 34%                | 16%                 | 18%                      |   |   |
| F - Old Growth Open   | 2%  | 0%                | 0%                 | 3%                  | 2%                       |   |   |
| G - Old Growth Closed   | 14% | 8%                | 32%                | 19%                 | 19%                      |   |   |
| <b>X</b> U- White Pine  |     | 1%                | 3%                 | 0%                  | 0%                       |   |   |
| <b>X</b> U- Yellow Poplar   |     | 2%                | 3%                 | 0%                  | 0%                       |   |   |
| <b>X</b> U- Pine-Dominated  |     | 1%                | 1%                 | 0%                  | 0%                       |   |   |



Ecological Departure

Uncharacteristic Classes

|    |    |    |    |   |   |
|----|----|----|----|---|---|
| 47 | 40 | 10 | 11 | - | - |
| 4  | 7  | 0  | 0  | 0 | 0 |

Total Cost

\$ - \$ 6,025,000 \$ 3,211,300 \$ - \$ - \$ - \$ -

ROI (vs. Min. Mgmt)

0.6 1.1 - - - -

| Scenarios (enter name below)    | Enter Notes                           | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |                                     |   |                                       |                            |  |                                    |
|---------------------------------|---------------------------------------|--|-------------------------------------|---|---------------------------------------|----------------------------|--|------------------------------------|
|                                 |                                       | RxFire   | Thinning - Late Closed (commercial) | Thinning- Mid Closed Older (commercial) | Gap Harvest + Thin (small commercial) | Regen Harvest (commercial) | Restoration Harvest w Oak Overstory (25%) (commercial) | Restoration Harvest + Plant (comm) |
| <b>No mgmt - 50 years</b>       |                                       |  |                                     |   |                                       |                            |  |                                    |
| <b>Max mgmt - 50 years</b>      | Thin Mid Closed 100 ac/yr 16-50       | 1000   | 100                                 | 100                                     | 100                                   | 100                        | 75   | 225                                |
| <b>U-B-Gone mgmt - 50 years</b> | Thin Mid Closed 75 ac/yr in yrs 16-50 | 800  | 125                                 | 75                                      | 75                                    | 100                        | 75   | 10                                 |
|                                 |                                       |  |                                     |   |                                       |                            |  |                                    |
|                                 |                                       |  |                                     |   |                                       |                            |  |                                    |
| Cost of Strategy (per acre)     |                                       | \$ 50  | \$ 50                               | \$ 50                                   | \$ 60                                 | \$ 50                      | \$ 50  | \$ 210                             |
| Number of Years                 |                                       | 50   | 50                                  | 35                                      | 50                                    | 50                         | 50   | 50                                 |



Strategy Worksheet

**Northern Hardwood Forest**

11,639 acres

100000

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | - | - | - | - | - |
|---|-----|-------------------|--------------------|---|---|---|---|---|
| A - Early   | 9%  | 2%                | 8%                 |   |   |   |   |   |
| B - Mid Closed  | 18% | 13%               | 10%                |   |   |   |   |   |
| C - Late Closed   | 69% | 81%               | 81%                |   |   |   |   |   |
| D - Late Open   | 4%  | 4%                | 1%                 |   |   |   |   |   |
|   |     |                   |                    |   |   |   |   |   |

Ecological Departure

|    |    |   |   |   |   |   |
|----|----|---|---|---|---|---|
| 12 | 12 | - | - | - | - | - |
|----|----|---|---|---|---|---|

Total Cost

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
|------|------|------|------|------|------|

ROI (vs. Min. Mgmt)

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| - | - | - | - | - | - |
|---|---|---|---|---|---|

|                                     | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |  |  |  |  |  |
|-------------------------------------|-------------|--|--|--|--|--|--|
| <b>Scenarios</b> (enter name below) |             |  |  |  |  |  |  |
| <b>No mgmt - 50 years</b>           |             |  |  |  |  |  |  |
|                                     |             |  |  |  |  |  |  |
|                                     |             |  |  |  |  |  |  |
|                                     |             |  |  |  |  |  |  |
|                                     |             |  |  |  |  |  |  |
| Cost of Strategy (per acre)         |             |  |  |  |  |  |  |
| Number of Years                     |             |  |  |  |  |  |  |

Strategy Worksheet

**Riparian & Floodplain Systems**

2,548 acres

100000

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|---|
| A - Early   | 15% | 4%                | 14%                | 17%                 | 17%                      |   |   |   |
| B - Mid Closed  | 23% | 14%               | 18%                | 20%                 | 20%                      |   |   |   |
| C - Mid Open  | 13% | 2%                | 6%                 | 6%                  | 6%                       |   |   |   |
| D - Late Open   | 40% | 17%               | 31%                | 29%                 | 29%                      |   |   |   |
| E - Late Closed   | 9%  | 60%               | 29%                | 26%                 | 26%                      |   |   |   |
| <b>x U- White Pine</b>  |     | 2%                | 2%                 | 2%                  | 2%                       |   |   |   |
|   |     |                   |                    |                     |                          |   |   |   |
|   |     |                   |                    |                     |                          |   |   |   |
|   |     |                   |                    |                     |                          |   |   |   |
|   |     |                   |                    |                     |                          |   |   |   |

Ecological Departure

**Uncharacteristic Classes**

|    |    |    |    |   |   |   |
|----|----|----|----|---|---|---|
| 54 | 22 | 21 | 21 | - | - | - |
| 2  | 2  | 2  | 2  | 0 | 0 | 0 |

Total Cost

\$ -      \$ 1,700      \$ 1,300      \$ -      \$ -      \$ -

ROI (vs. Min. Mgmt)

58.8      76.9      -      -      -

| Scenarios (enter name below)    | Enter Notes             | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |  |  |  |  |
|---------------------------------|-------------------------|--|--|--|--|--|
|                                 |                         | RxFire   |  |  |  |  |
| <b>No mgmt - 50 years</b>       |                         |  |  |  |  |  |
| <b>Max mgmt - 50 years</b>      | 33 acres carryover fire | <b>33</b>  |  |  |  |  |
| <b>U-B-Gone mgmt - 50 years</b> | 33 acres carryover fire | <b>25</b>  |  |  |  |  |
|                                 |                         |  |  |  |  |  |
|                                 |                         |  |  |  |  |  |
|                                 |                         |  |  |  |  |  |
| Cost of Strategy (per acre)     |                         | \$ 1   |  |  |  |  |
| Number of Years                 |                         | 50   |  |  |  |  |

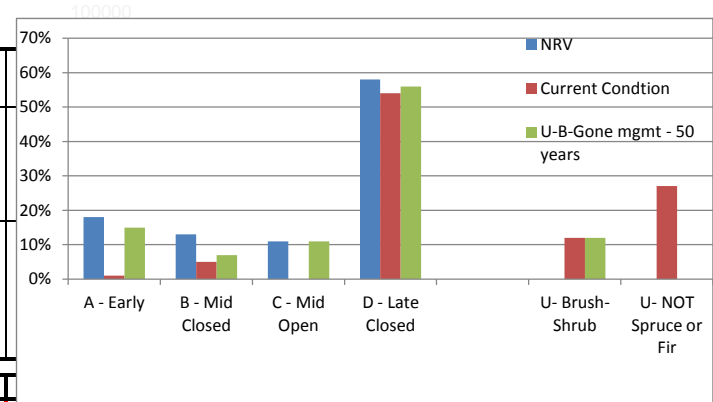
Strategy Worksheet

**Spruce-Fir Forest**

2,236 acres

Enter percentages from "Final Conditions" as a whole number

| Vegetation Class (describe)<br><i>type x in left box if high-risk</i> | NRV | Current Condition | No mgmt - 50 years | Max mgmt - 50 years | U-B-Gone mgmt - 50 years | - | - |
|---|-----|-------------------|--------------------|---------------------|--------------------------|---|---|
| A - Early   | 18% | 1%                | 11%                | 15%                 | 15%                      |   |   |
| B - Mid Closed  | 13% | 5%                | 5%                 | 7%                  | 7%                       |   |   |
| C - Mid Open  | 11% | 0%                | 7%                 | 11%                 | 11%                      |   |   |
| D - Late Closed   | 58% | 54%               | 38%                | 56%                 | 56%                      |   |   |
| <b>x</b> U- Brush-Shrub   |     | 12%               | 12%                | 12%                 | 12%                      |   |   |
| <b>x</b> U- NOT Spruce or Fir   |     | 27%               | 27%                | 0%                  | 0%                       |   |   |



Ecological Departure

Uncharacteristic Classes

|    |    |    |    |   |   |   |   |
|----|----|----|----|---|---|---|---|
| 40 | 39 | 11 | 11 | - | - | - | - |
| 39 | 39 | 12 | 12 | 0 | 0 | 0 | 0 |

Total Cost

\$ - \$ 240,000 \$ 240,000 \$ - \$ - \$ - \$ -

ROI (vs. Min. Mgmt)

22.9 22.9 - - - -

| Scenarios (enter name below) | Enter Notes | Enter Management Strategies, Number of Acres/Year, Costs & Number of Years |  |  |  |  |  |
|------------------------------|-------------|--|--|--|--|--|--|
|                              |             | Spruce Restoration (50% commercial)  |  |  |  |  |  |
| No mgmt - 50 years           |             |  |  |  |  |  |  |
| Max mgmt - 50 years          |             | 40   |  |  |  |  |  |
| U-B-Gone mgmt - 50 years     |             | 40   |  |  |  |  |  |
|                              |             |  |  |  |  |  |  |
|                              |             |  |  |  |  |  |  |
| Cost of Strategy (per acre)  |             | \$ 300   |  |  |  |  |  |
| Number of Years              |             | 20   |  |  |  |  |  |