



What's the Score?

Step 1.

Determine how many acres you plan for each **land use**. The total should be 400 acres.

$$(\text{ ______ acres Wilderness}) + (\text{ ______ acres Trails}) + (\text{ ______ acres Campground}) + (\text{ ______ acres Hunting}) + (\text{ ______ acres Fishing}) + (\text{ ______ acres Timber Harvest}) = \text{ ______ Total Acres}$$

Step 2.

Calculate how many **visitors** per year this plan will attract to your community.

$$(\text{ ______ acres Wilderness} \times 5 \text{ visitors/acre}) + (\text{ ______ acres Trails} \times 25 \text{ visitors/acre}) + (\text{ ______ acres Campground} \times 50 \text{ campers/acre}) + (\text{ ______ acres Hunting} \times 1 \text{ hunters/acre}) + (\text{ ______ acres Fishing} \times 2 \text{ anglers/acre}) + (\text{ ______ acres Timber Harvest} \times 5 \text{ visitors/acre}) = \text{ ______ Total Visitors per Year}$$

Step 3.

Calculate how this plan will affect the **wildlife** management indicator species. Compare the totals you get to the original population of 8 owls, 400 wood rats, and 10,000 salamanders.

$$\text{Owls: } (\text{ ______ acres Wilderness}) + (\text{ ______ acres Hunting}) + (\text{ ______ acres Timber Harvest}) = \text{ ______ acres that will support owls} \times 0.02 \text{ owls/acre} = \text{ ______ Total Owls (Note: Round down to the nearest whole owl.)}$$

$$\text{Wood Rats: } (\text{ ______ acres Wilderness}) + (\text{ ______ acres Trails}) + (\text{ ______ acres Hunting}) + (\text{ ______ acres Timber Harvest}) = \text{ ______ acres that will support wood rats} \times 1 \text{ wood rat/acre} = \text{ ______ Total Wood Rats}$$

$$\text{Salamanders: } (\text{ ______ acres Wilderness}) + (\text{ ______ acres Hunting}) + (\text{ ______ acres Timber Harvest}) = \text{ ______ acres that will support salamanders} \times 25 \text{ salamanders/acre} = \text{ ______ Total Salamanders}$$

Step 4.

Calculate how many **miles of trail or road** are needed for your plan.

$$(\text{ ______ acres Trails}) \div 6 \text{ acres/mile} = \text{ ______ Total Miles of Trail}$$

$$(\text{ ______ acres Campground} \times 250 \text{ ft/acre}) \div 5,280 \text{ ft/mile} = \text{ ______ miles of road for Campground}$$

$$(\text{ ______ acres Hunting} \times 100 \text{ ft/acre}) \div 5280 \text{ ft/mile} = \text{ ______ miles of road for Hunting}$$

$$(\text{ ______ acres Timber Harvest} \times 100\text{ft/acre}) \div 5280 \text{ ft/mile} = \text{ ______ miles of road for Timber Harvest}$$

Step 5.

Calculate how many mature **trees** remain based on your plan.

$$(\text{ ______ miles of Trail} \times 0.36 \text{ acres/mile}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$(\text{ ______ miles Campground road} \times 1.45 \text{ acres/mile}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$(\text{ ______ miles Hunting road} \times 1.45 \text{ acres/mile}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$(\text{ ______ acres of Fishing}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$(\text{ ______ miles Timber Harvest road} \times 1.45 \text{ acres/mile}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$(\text{ ______ acres Timber Harvest} \times 1/35 \text{ harvested}) \times 150 \text{ trees/acre} = \text{ ______}$$

$$\text{Total trees removed } \text{ ______}$$

$$60,000 \text{ mature trees in 400-Acre Wood} - \text{ trees removed} = \text{ trees remaining } \text{ ______}$$

(continued on next page)



What's the Score? (continued)

Step 6.

Calculate the **revenue and costs** associated with your plan, and determine the net profit or loss.

Revenue

Fees (per year)

- _____ Wilderness visitors x \$2 fee per visitor = \$ _____
- _____ Trails visitors x \$2 fee per visitor = \$ _____
- _____ Campground campers x \$20 fee per site ÷ 2 campers per site = \$ _____
- _____ hunters x \$5 fee per hunter = \$ _____
- _____ anglers x \$2.50 fee per angler = \$ _____
- _____ Timber Harvest visitors x \$2 fee per visitor = \$ _____

Sale of Trees

- _____ trees removed for Trails x \$50 per tree = \$ _____
- _____ trees removed for Campground road x \$50 per tree = \$ _____
- _____ trees removed for Hunting road x \$50 per tree = \$ _____
- _____ trees removed for Fishing x \$50 per tree = \$ _____
- _____ trees removed for Timber Harvest x \$50 per tree = \$ _____

Total Revenue \$ _____

Costs

Management Costs (per year)

- _____ acres Wilderness x \$2.50 per acre = \$ _____
- _____ acres Trails x \$50 per acre = \$ _____
- _____ acres Campground x \$200 per acre = \$ _____
- _____ acres Hunting x \$5 per acre = \$ _____
- _____ acres Fishing x \$2.50 per acre = \$ _____
- _____ acres Timber Harvest x \$5 per acre = \$ _____

Construction Costs

- _____ miles of Trail x \$100 per mile = \$ _____
- _____ miles Campground road x \$600 per mile = \$ _____
- _____ acres Campground x 4 sites per acre x \$1000 per site = \$ _____
- _____ miles Hunting road x \$600 per mile = \$ _____
- _____ acres Fishing x \$3000 per acre = \$ _____
- _____ miles Timber Harvest road x \$600 per mile = \$ _____

Total Costs \$ _____

Profit or Loss

(Total Revenue \$ _____) – (Total Costs \$ _____) = \$ _____ Net

If the Net amount is positive, it is a profit; if it is negative, it is a loss.