



**BAYFIELD COUNTY
FORESTRY AND PARKS DEPARTMENT**

2016 BUDGET NARRATIVE

BUDGET SUMMARY AND HIGHLIGHTS

Revenues: Forest Management Program

Traditionally, all of the revenues received over the course of a year came from the management of the County Forest. However, over the past few years, the Forestry Department has been assigned primary management responsibilities of both the County Parks and Trails Programs. In addition to the revenues received from the sale of wood, the Forestry and Parks Department now receives revenues from camping and other parks related activities, as well as monies pertaining to state funded trail maintenance, rehabilitation and construction.

Sale of Wood (Timber Sales)

The sale of wood is the primary source of revenue for the Forestry and Parks Department (approximately 96% of total revenues received from County Forest management and 89% Department wide). Revenues from the sale of wood on the County Forest for the calendar year 2016 are projected to increase from the adopted budget of \$2.75 million in 2015 to a conservative estimate of \$2.9 million. Much of the predicted revenue increase is the end result of adding a new forester position in 2011, as well as the addition of 2,602 acres of forest land to the County Forest, via the Knowles-Nelson Stewardship Land Acquisition grant. The position was added, in part, to assist in the management of a growing sustainable timber harvest goal (see Tables 13 and 14). The total allowable harvest goal for 2015 was 4,645 acres, an increase of over 50% since 2006.

Table 1 displays the total number of timber sales, acres and bid values from 2007-2015 (2015 is an estimate).

Table 1: Bayfield County Forest Timber Sale Summary

Calendar Year	Sales Offered	Acres Offered	Sales Sold	Acres Sold	Acres Not Sold	Timber Sale Bid Values	Bid Value per Acre	Timber Revenues
2007	59	3,771	45	3,157	614	\$2,140,897	\$678	\$2,167,156
2008	58	3,546	55	3,507	39	\$2,381,513	\$679	\$2,621,308
2009	45	3,297	42	3,100	197	\$2,510,601	\$810	\$2,305,259
2010	40	3,218	40	3,218	0	\$2,404,178	\$747	\$2,047,663
2011	54	4,156	54	4,156	0	\$3,629,330	\$873	\$2,477,066
2012	53	4,782	53	4,782	0	\$4,900,194	\$1,025	\$2,696,756
2013	54	4,275	53	4,177	98	\$3,614,091	\$865	\$3,904,104
2014	61	4,388	61	4,388	0	\$5,252,530	\$1,197	\$4,537,661
2015	60	4,300	60	4,300	0	\$5,500,000	\$1,279	\$4,250,000
Average	54	3,970	51	3,865	105	\$3,592,593	\$906	\$3,000,775

Periodically, the Forestry and Parks Department manages County owned forest land that is not part of the County Forest. Much of this land was included with the Stewardship grant and will be enrolled in County Forest Law (CFL). However, a few parcels will remain as county owned, without the County Forest designation. When these

parcels are managed, sale of wood revenues are designated as non-CFL in the budget. The budget for non-CFL timber sale revenue in 2015 was \$75,000. The budget for 2016 is \$25,000.

The additional forester has given this Department the ability to reach the targeted sustainable timber harvest goal, thus maximizing the value potential of the Forest. Prior to 2011, the average annual establishment of timber sales was just over 3,000 acres. In 2011, the Department established nearly 4,500 acres of new sales and is projecting annual sustainable harvest goals between 4,500 and 4,800 acres. The \$85,000 investment dedicated to the new forester position will generate additional sale of wood revenues ranging from \$1.0 to \$1.5 million per year!

In 2014, the total value of new timber sales was over \$5.2 million! The projection for 2015 is roughly \$5.5 million. Prior to 2011, this Department averaged approximately \$2.36 million in new timber sales per year. That’s an increase of over 133%! As long as markets continue to stay constant (and they will come down a little), the value of new timber sales should average around \$4.0 to \$4.5 million per year. Furthermore, the added sales have the potential to foster new job opportunities and supply local wood product industries with the material they need to maintain productivity.

It takes a while before changes in the timber management program come to fruition. In 2013, we finally started to see returns from the investment in the new forester, by eclipsing the \$3.0 million dollar stumpage revenue mark (for the first time) and nearly reaching \$4.0 million. In 2014, we surpassed \$4.5 million in stumpage revenues! Estimates for 2015 are between \$4.2 and \$4.7 million. Maximizing the potential of the Forest, combined with a very strong market, has sparked these record revenues. The market will eventually stabilize and stumpage prices will come down. In the end, all we can do (all that is really within our control) is continue to reach our sustainable harvest goals and offer high quality sales for competitive bidding.

The new forester position has been in place for over four full seasons. We are now starting to see outputs, as well as revenues, normalize. In general, timber sale contracts are two years in length, with the potential for two one-year extensions. In other words, it can take up to four years before the full value of a timber sale is realized. Work on maximizing the sustainable management of the Forest started in 2011. Assuming constant markets and stable establishment goals, actual revenues from the sale of wood are projected to be around \$3.0 million per year (a very conservative estimate).

Table 2 displays the budgeted and actual sale of wood revenues since 2007 (the revenues for 2015 and 2016 are estimated):

Table 2: Bayfield County Forest Sale of Wood Revenues

Calendar Year	Revenues Budget	Revenues Actual	Difference
2007	\$1,705,000	\$2,167,156	\$462,156
2008	\$1,700,000	\$2,621,308	\$921,308
2009	\$1,727,400	\$2,305,259	\$577,859
2010	\$1,820,500	\$2,047,663	\$227,163
2011	\$1,996,000	\$2,477,066	\$481,066
2012	\$2,195,000	\$2,696,756	\$501,756
2013	\$2,400,000	\$3,904,104	\$1,504,104
2014 ^a	\$2,751,565	\$4,537,661	\$1,786,096
2015 ^a	\$3,110,000	\$4,200,000	\$1,090,000
2016	\$2,900,000	\$2,900,000	\$0
Average	\$2,230,547	\$2,995,219	\$755,151

^a amended budget

Since 2011, Bayfield County has sold an average of nearly \$4.6 million in new timber sales per year. As previously stated, due to the long term nature of the timber sale contracts, it can take a while before actual stumpage revenues also increase. Stumpage revenues did increase slightly in 2012, but significantly in 2013 and 2014. Revenues are expected to stay in the mid \$4.0 million range for 2015 as well. However, again, due to the long term nature of timber sale contracts and relative uncertainty in wood markets, stumpage revenue budgets will continue to be conservatively estimated. The sale of wood revenue budget for 2016 is \$2.9 million (the largest adopted budget to date), a 70% increase from what was budgeted in 2007.

Other Revenues: Grants, Aids and Loans

Revenues from other sources, including grants, aids and loans, are estimated to remain relatively stable in 2016.

Revenues from the sale of miscellaneous forest products and permit fees are estimated to be \$1,500. Revenues from the sale of sand and gravel are estimated to be \$1,000. Another significant revenue source is the \$9,042 lease for a communications tower that was constructed on County Forest land.

Numerous miscellaneous competitive grants are applied for throughout the year and have the potential to provide additional significant increases in revenues. The WDNR Sustainable Forestry Grant and Arbor Day Grant are two good examples of grants that have been received mid-budget. In 2015, a Knowles-Nelson Stewardship Land Acquisition grant was received. This grant was valued at \$2,265,770 and was used towards the purchase of 1,855 acres of forest land.

Table 3 displays total actual revenues received per account type since 2006. Revenues for 2015 and 2016 are estimated:

Table 3: Forest Management Program Actual Revenues per Account Type (2015 & 2016 are estimates)

Year	Sale of Wood	Grants ³	Road Aid	Loans	Permits	Sand/Gravel	Leases	Transfers ¹	Other ²	Total
2006	\$1,615,584	\$51,536	\$8,037	\$84,548	\$1,160	\$165	\$0	\$0	\$37,948	\$1,798,978
2007	\$2,167,270	\$61,142	\$9,418	\$84,588	\$850	\$5,168	\$0	\$80,230	\$85,354	\$2,494,020
2008	\$2,621,308	\$115,456	\$10,440	\$84,588	\$995	\$3,060	\$0	\$0	\$1,263	\$2,837,110
2009	\$2,305,259	\$87,996	\$12,126	\$84,669	\$553	\$150	\$0	\$0	\$2,309	\$2,493,062
2010	\$2,047,663	\$82,923	\$11,390	\$84,668	\$2,715	\$9,442	\$0	\$0	\$6,629	\$2,245,430
2011	\$2,477,066	\$104,247	\$11,347	\$84,667	\$2,004	\$563	\$7,800	\$0	\$13,655	\$2,701,349
2012	\$2,696,756	\$80,299	\$11,330	\$0	\$1,597	\$19,544	\$8,034	\$0	\$29,309	\$2,846,869
2013	\$3,904,104	\$105,608	\$11,896	\$0	\$2,320	\$0	\$8,275	\$0	\$3,978	\$4,036,181
2014	\$4,561,503	\$65,083	\$11,917	\$0	\$1,090	\$16,500	\$8,523	\$0	\$4,243	\$4,668,859
2015	\$4,250,000	\$2,399,985	\$11,918	\$0	\$1,250	\$1,000	\$8,779	\$0	\$3,000	\$6,675,932
2016	\$2,925,000	\$61,638	\$12,000	\$0	\$1,500	\$1,000	\$9,042	\$0	\$3,000	\$3,013,180
Avg	\$2,870,138	\$292,356	\$11,074	\$46,157	\$1,458	\$5,145	\$4,587	\$7,294	\$17,335	\$3,255,543

¹ From General Fund or Non-Lapsing accounts.

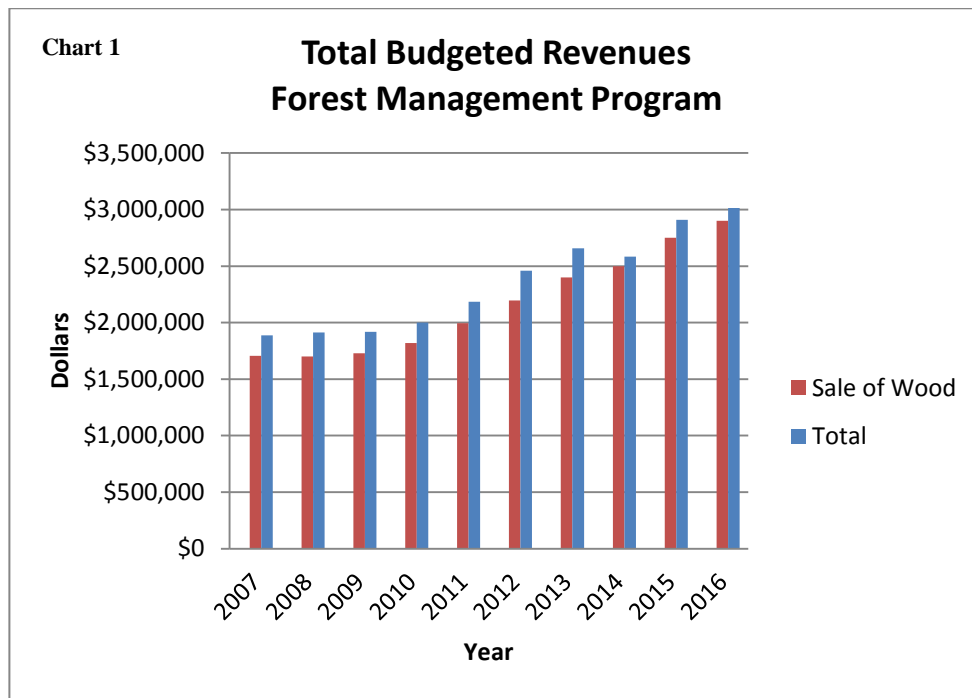
² Includes donations, equipment sales, use agreements, etc.

³ CY 2015 includes revenue received from the Knowles-Nelson Steward Grant for land acquisition (\$2,265,770).

Total Revenues: Forest Management Program

In summary, 2016 budgeted sale of wood revenues increased by about 5% from the amount budgeted in 2015. Total budgeted revenues increased by roughly 4% over the same period. The budget for sale of wood revenues has steadily increased over the past 8 years, by over 70% since 2007.

Chart 1 illustrates the total budgeted revenues for the forest management program from 2007 through 2016.



Total revenues from the management of the County Forest are projected to be \$3,013,180, roughly 60% greater than budgeted revenues for 2007.

Revenues: Parks Program

The Forestry Department was assigned the management of all county owned parks in 2011. The four county managed parks include three campgrounds: Twin Bear, Delta Lake and Big Rock; and one day use park: Atkins Lake. Revenues for the parks come in a variety of forms. The primary revenue is from camping (approximately 88% of revenues received).

Table 4 breaks down annual revenues per park (2015 and 2016 are estimated):

Table 4: Annual Distribution of Revenues for the Parks Program (2014 and 2015 are estimated)

Year	Twin Bear			Delta Lake			Big Rock			Atkins Lake			Total
	Camping	Boat Launch	Other*	Camping	Boat Launch	Other*	Camping	Boat Launch	Other*	Camping	Boat Launch**	Other*	
2011	\$41,440	\$7,040	\$2,370	\$22,367	\$801	\$42	\$2,812	\$0	\$0	\$0	\$261	\$0	\$77,131
2012	\$47,855	\$6,163	\$2,430	\$27,080	\$861	\$57	\$3,860	\$0	\$0	\$0	\$215	\$0	\$88,521
2013	\$44,602	\$5,324	\$2,092	\$18,982	\$912	\$55	\$3,524	\$0	\$0	\$0	\$181	\$0	\$75,672
2014	\$46,523	\$4,649	\$2,649	\$18,201	\$1,005	\$97	\$3,733	\$0	\$0	\$0	\$689	\$0	\$77,547
2015	\$43,000	\$5,000	\$2,750	\$19,000	\$1,000	\$500	\$3,750	\$0	\$0	\$0	\$0	\$0	\$75,000
2016	\$45,000	\$5,000	\$3,000	\$20,000	\$1,000	\$500	\$3,500	\$0	\$0	\$0	\$0	\$0	\$78,000
Avg	\$44,737	\$5,571	\$2,507	\$20,939	\$930	\$208	\$3,530	\$0	\$0	\$0	\$224	\$0	\$78,645

* includes boat mooring, boat rental, dump station and shower fees, if applicable.

** Atkins Lake boat launch was free in 2015 & 2016.

Camping revenues for 2016 are predicted to stay constant at around \$68,500. However, weather conditions can have a significant impact on potential revenues. The other significant form of parks revenue comes from boat launch and mooring fees, which are predicted to be around \$8,000. Canoe and kayak rentals were added in 2015 and will continue in 2016. Wireless internet was also added in 2015 (at Twin Bear and Delta Lake) and included in the camping fee. Public use boat launch sites are located at Twin Bear, Delta Lake and Atkins Lake. Total park revenues for 2016 are expected to be around \$78,000.

Revenues: Trails Program

The Forestry and Parks Department was assigned the management of the county trails program starting the summer of 2013. This primarily includes the active field management of the county wide, state funded ATV/UTV and snowmobile trail programs. Promotion and advertising of the state funded trail system will still be handled by the Tourism Department.

The primary source of revenue for the trails program comes from the State of Wisconsin in the form of maintenance on existing trails.

Table 5 summarizes the total amount of annual maintenance funds received per trail type:

Table 5: Mileage and Funding For Trails Managed by Bayfield County

Trail Type	Miles	Rate/Mile	Total
Snowmobile Maintenance	437	\$250	\$109,250
ATV Summer Maintenance	86.75	\$600	\$52,050
ATV Winter Maintenance	168.15	\$100	\$16,815
UTV Maintenance	86.75	\$100	\$8,675
Total			\$186,790

Additional state grants for new trails, or repairs to existing infrastructure, are also applied for annually. Awards are based primarily on available funding and are not guaranteed from year to year. Bayfield County also typically receives a state supplemental snowmobile trail grant every year (if applicable). These grants can be used to help cover the costs of maintaining trails, where routine maintenance has exceeded available funds. Supplemental funds are also subjected to availability, are pro-rated based on the amount requested from other county applications throughout the state and, therefore, are not guaranteed to cover 100% of the overage. Depending on these factors, Bayfield County has seen supplemental requests funded at rates from 60% to 100%.

Most supplemental and new project grants are awarded after the completion of the budget. Budgets are typically amended to reflect the value of awarded new projects. The total estimated revenue budget for trails in 2016 is \$186,790 (which is just the routine annual maintenance amount).

Total Revenues: Forestry, Parks and Trails

Total revenues for the combined management of the forestry, parks and trails programs are estimated to be \$3,277,970 for 2016. This represents a slight increase when compared to the 2015 adopted budget. In the 2015 budget, numerous pre-approved trail maintenance grants were included, which are not part of the 2016 budget, thus contributing to the rather small increase in overall revenues.

For the purpose of making accurate comparisons, the focus has been to assess one adopted budget to the next. Budgets are amended periodically throughout the year to account for unforeseen revenues and/or expenses. Comparing adopted budgets is the only way to accurately evaluate data and assess trends.

Also, because sale of wood revenues have traditionally been estimated conservatively, actual revenues have routinely exceeded the budget, oftentimes significantly. From 2007 through the estimate for 2015, the actual sale

of wood revenues exceeded budgeted revenues by an average of 39%, with 2013, 2014 and 2015 (predicted) generating substantial surpluses (see Table 2).

Table 6 describes total budgeted revenues per program type from 2007-2016 (2015 and 2016 are estimated).

Table 6: Total Budgeted Revenues Per Program

Calendar Year	Forest Management	Parks	Trails*	Total
2007	\$1,885,971	\$0	\$0	\$1,885,971
2008	\$1,912,971	\$0	\$0	\$1,912,971
2009	\$1,918,763	\$0	\$0	\$1,918,763
2010	\$1,999,655	\$0	\$0	\$1,999,655
2011	\$2,183,591	\$87,250	\$0	\$2,270,841
2012	\$2,458,679	\$80,000	\$0	\$2,538,679
2013	\$2,302,392	\$80,000	\$352,878	\$2,735,270
2014	\$2,584,142	\$80,000	\$195,465	\$2,859,607
2015	\$2,910,204	\$83,000	\$272,832	\$3,266,036
2016	\$3,013,180	\$78,000	\$186,790	\$3,277,970
Average	\$2,316,955	\$81,375	\$251,991	\$2,650,321

**2013 figure included already approved new construction grants when transferred to Forestry.*

As stated earlier, the reason to estimate conservatively is due to the long term nature of timber sale contracts and instabilities in wood markets. To budget accurately, we are projecting when a sale will be harvested (at some point over a 4 year period) and forecasting market conditions at the time when future sales are sold. Both predictions contain an element of risk, hence the conservative estimates.

However, since 2007, we have steadily increased budgeted revenues. From 2007 through 2016, budget revenues for the forest management program have increased by 60%. Total forest management budgeted revenues for 2016 are the highest level to date at \$3,013,180. As we inch closer to \$3.0 million in budgeted sale of wood revenues (\$2.9 million for 2016, plus \$25,000 for non-CFL lands), the margin for error will significantly decrease and the potential to generate less than the budget will increase.

Expenditures: Forest Management Program

The forest management program accounts for the vast majority of total expenses within the Department. The most significant expenses include personnel, general operating costs associated with the management of the 167,000 acre County Forest, reforestation, and payments to each Township that contains County Forest acreage.

Personnel Expenses

The most significant expense incurred by the Forestry and Parks Department is personnel. In the summer of 2013, the Trails Program was moved from Tourism to Forestry and Parks. As part of the move, the Department created a new full time position – Recreation Forester. The Department now consists of 9 full time positions including: 4 foresters, 1 recreation forester, 1 forest technician, 1 office manager, 1 assistant administrator and 1 administrator (note: nearly half of the administrator’s salary and benefits are reimbursed to the county by the Wisconsin DNR, through the County Forest Administrator grant).

Aside from the increase in total full time staff, the cost of health insurance has been the biggest contributor to the increase in personnel expenses. Since 2007, the total cost of health insurance within the Department has increased by over 90%. Some of the increase is a result of adding the two new full time positions since 2011 and some is

related to changes in family status within the Department (moving from an individual plan to a family plan increases the cost of insurance by nearly \$15,000 per occurrence). In 2016, total personnel expenses, which include wages, health insurance, retirement, FICA/Medicare, HRA and Committee per diem, are expected to be around \$752,000, an increase of 5% from 2015.

Township Payments

The second most significant recurring budgeted expense(s) are combined payments to towns. Townships that contain County Forest acreage receive a state mandated payment equal to ten (10) percent of net revenues generated from the sale of wood on County Forest lands. The distribution of this money is based solely on the percentage of acreage contained within each township. The payment for 2014 was over \$450,000. Estimated total payments to the towns are projected to be \$420,000 in 2015 and \$290,000 in 2016.

Table 7 describes the total average annual payments received by each township that contains Bayfield County Forest acreage (values for 2015 are estimated). DNR PILT payments (payment in lieu of taxes) are made directly by the State of Wisconsin and were included in this table to display the total direct net revenues received by each township that contains County Forest acreage.

Table 7: Average Annual Revenues per Township (2010-2015)*

Township	County Forest Acreage	Avg. Bayfield County 10% Timber Sales	DNR PILT Payments (\$0.30/ac)	Avg. Bayfield County Town Road Aids	Total Avg. Annual Compensation
Barnes	39,362	\$76,839.34	\$11,808.60	\$5,689.59	\$94,337.53
Bayfield	32,793	\$64,087.79	\$9,837.90	\$6,203.51	\$80,129.20
Bayview	12,952	\$25,311.74	\$3,885.60	\$4,107.03	\$33,304.37
Bell	14,585	\$28,504.10	\$4,375.50	\$3,431.70	\$36,311.30
Cable	5,556	\$10,858.91	\$1,666.80	\$1,625.00	\$14,150.71
Clover	5,387	\$10,527.19	\$1,616.10	\$2,298.78	\$14,442.07
Hughes	24,057	\$47,014.67	\$7,217.10	\$3,322.08	\$57,553.85
Iron River	6,042	\$11,808.37	\$1,812.60	\$2,333.33	\$15,954.31
Oriente	4,720	\$9,224.49	\$1,416.00	\$2,608.33	\$13,248.83
Port Wing	8,876	\$17,346.91	\$2,662.80	\$2,183.00	\$22,192.71
Russell	8,571	\$16,750.35	\$2,571.30	\$1,812.50	\$21,134.15
Tripp	6,544	\$12,780.35	\$1,963.20	\$4,198.67	\$18,942.21
Total	169,445	\$331,054.22	\$50,833.50	\$39,813.52	\$421,701.24

* 2015 values are estimated.

In 2010, the Department adopted a Town Road Improvement Aid program. This program appropriated 1% of the total sale of wood revenues to town road improvement projects (triggered when actual revenues exceed budgeted revenues by 1%). In 2014, the Forestry and Parks Committee increased this fund to 2% of the sale of wood revenues. A little over \$80,000 worth of town road projects were approved in 2015. It is estimated that \$80,000 will be earmarked for 2016 projects. Combined with the share of record revenues received in 2014, the county distributed over \$530,000 to the townships in 2014, an increase of over 330% when compared to 2006 (roughly \$162,000).

The total county payment to townships is expected to be roughly \$500,000 in 2015 and \$370,000 in 2016 (again, a conservative estimate).

Reforestation

Bayfield County maintains one of the largest public land reforestation programs in the state. Reforestation expenses come in a variety of forms including planting, seeding, release, site preparation, and, on occasion, seedling protection. The treatment of invasive species has also been recently added to the list.

Total reforestation expenses for 2016 are estimated to be \$175,000. This represents an increase of 6% when compared to budgeted costs in 2015. Roughly \$125,000 of the reforestation budget is for planting, seeding and site preparation related expenses. Approximately \$40,000 is for the control of invasive species (primarily on forest roads in the Barrens area), though all or a portion of this expense may be covered by a WDNR Sustainable Forestry grant (which is currently being used to fund the first round of spotted knapweed control in the Barrens area). The remaining expenses are for plantation release and seedling protection.

Operating Expenses

Operating expenses are projected to be nearly \$165,000 for 2016, an increase of 16% when compared to the 2015 adopted budget. Additional expenses for road and trail maintenance/improvements are the biggest reasons for the increase.

The most significant operating expenses include mileage for the fleet of vehicles, materials and supplies for the establishment of timber sales, utilities for the garage, data processing and office supplies, repair, maintenance and improvements of roads and trails, repair and maintenance of field equipment, the expenditure of numerous grants and loans, publications, subscriptions, dues and professional development.

Total Expenses: Forest Management Program

Total forest management program expenses are estimated to be \$1.46 million in 2016. This represents an increase of 5.8% when compared to the adopted 2015 budget. Additional reforestation expenses, mandatory payments to the towns, road and trail related expenses and personnel expenses are the primary reasons for the increase.

Table 8 displays total actual expenses incurred per account type since 2006 (2015 and 2016 are estimated):

Table 8: Forest Management Program Expense Summary per Account Type

Year	Personnel¹	Operating	Reforestation	Town Payment²	Loans	Land Purchase	Total
2006	\$423,646	\$134,827	\$152,369	\$161,558	\$84,548	\$0	\$956,948
2007	\$440,632	\$117,764	\$153,453	\$216,830	\$84,588	\$358,325	\$1,371,592
2008	\$463,030	\$176,453	\$81,453	\$270,636	\$84,588	\$114	\$1,076,274
2009	\$479,696	\$96,838	\$157,117	\$231,083	\$84,669	\$0	\$1,049,403
2010	\$475,294	\$96,021	\$133,148	\$218,339	\$84,668	\$0	\$1,007,470
2011	\$588,787	\$124,533	\$149,697	\$277,033	\$84,667	\$0	\$1,224,717
2012	\$608,110	\$135,334	\$115,304	\$290,808	\$0	\$50,000	\$1,199,556
2013	\$655,895	\$142,207	\$92,486	\$418,674	\$0	\$0	\$1,309,261
2014	\$705,295	\$100,595	\$96,289	\$533,684	\$0	\$20,000	\$1,455,863
2015	\$716,045	\$178,620	\$165,000	\$500,000	\$0	\$2,625,770	\$4,185,435
2016	\$752,309	\$164,541	\$175,000	\$370,000	\$0	\$0	\$1,461,850
Average	\$537,821	\$124,952	\$133,756	\$290,961	\$46,157	\$277,655	\$1,481,670

¹ Includes wages, insurances, retirement, FICA/Medicare, HRA, and Committee Per Diem.

² Towns which contain county forest land receive a prorated 10% share of total sale of wood revenues. Starting 2010, also includes payments from Town Road Aid program.

Expenses: Parks Program

Expenses relating to the management of the parks program are far less than those associated with managing the county forest. Primary expenses include contractual services for the caretaking of the grounds and facilities, waste

management (garbage removal), utilities (electric and propane) and repair and maintenance. Contractual services are the largest parks management expense.

Table 9 displays the annual budgeted expenses for the parks program since 2011.

Table 9: Annual Budgeted Expenses For the Parks Program

Year	Contractual Services	Utilities	Repair & Maintenance	Other*	Total	Actual**
2011	\$22,500	\$10,550	\$10,000	\$830	\$43,880	\$42,205
2012	\$30,700	\$9,650	\$12,000	\$1,175	\$53,525	\$55,826
2013	\$31,270	\$10,125	\$12,000	\$1,400	\$54,795	\$53,839
2014	\$32,543	\$10,625	\$12,000	\$1,400	\$56,568	\$50,655
2015	\$35,000	\$14,525	\$12,000	\$1,400	\$62,925	\$58,650
2016	\$35,000	\$11,950	\$11,000	\$1,400	\$59,350	\$59,350
Average	\$31,169	\$11,095	\$11,500	\$1,241	\$55,005	\$53,421

* Printing and Permit Related Expenses

** 2015 and 2016 are estimated.

The caretaking of the facilities and grounds, as well as hosting and managing reservations are all duties performed by contractors. The estimated cost of these services is \$35,000 in 2016. The repair and maintenance of all four parks, as well as all utilities, communications and miscellaneous fees are estimated to be nearly \$23,000. Total expenses for 2016 are estimated to be \$59,350, a decrease of roughly 6% from 2015.

Expenses: Trails Program

The management of the trails program primarily involves maintaining existing trail networks. In a nutshell, this basically means utilizing the annual allocation of maintenance funds provided by the State of Wisconsin, with expenditures offsetting revenues. Occasionally, new grants are awarded for the construction of new trails or major repairs to existing ones (trail rehabilitation). In the past, expenditures equaled revenues on all new construction or trail rehabilitation grants. However, new legislation may require a 20% contribution on all future new construction or rehabilitation grants. This could mean a significant future expenditure on anything other than basic trail maintenance.

Total expenditures for 2016 are estimated to equal revenues: \$186,790 (see Table 5). All new construction or rehabilitation grants, as well as any supplemental grants, are typically awarded after the budget is approved, and, if necessary, would require a budget amendment.

Total Expenditures: Forestry, Parks and Trails

Total expenses for the combined management of the forestry, parks and trails programs are estimated to be approximately \$1.7 million for 2016. This represents a slight decrease when compared to the 2015 adopted budget.

Since 2011, expenses pertaining to the management of the County Forest have increased approximately 23%. The additional position (recreation forester added in June 2013), increases in personnel costs, increases in reforestation expenses and larger payments to Townships (as per 10% revenue sharing and increases in the Town Road Aid fund) all contribute to this overall increase.

Park expenses remain relatively stable, but trail costs are largely associated with awarded grants. Trail expenses are based on the total value of the annual maintenance funds, as well as any other previously awarded grant that was not expended during the previous year. Trail grants are zero sum items in the budget, meaning revenues offset expenditures (as with most grants), but they still contribute to the overall bottom line.

Table 10 describes the total budgeted expenses for the Forestry and Parks Department per program type since 2007 (2015 and 2016 are estimated).

Table 10: Total Budgeted Expenses per Program

Year	Forest Management	Parks	Trails	Total
2007	\$924,556	\$0	\$0	\$924,556
2008	\$998,087	\$0	\$0	\$998,087
2009	\$1,014,215	\$0	\$0	\$1,014,215
2010	\$1,094,396	\$0	\$0	\$1,094,396
2011	\$1,185,817	\$43,880	\$0	\$1,229,697
2012	\$1,175,252	\$53,525	\$0	\$1,228,777
2013	\$1,171,489	\$54,795	\$352,878	\$1,579,162
2014	\$1,220,175	\$56,568	\$196,965	\$1,473,708
2015	\$1,377,531	\$62,925	\$272,832	\$1,713,288
2016	\$1,461,850	\$59,350	\$186,790	\$1,707,990
Average	\$1,162,337	\$55,174	\$252,366	\$1,469,877

Capital Expenditures: Forestry, Parks and Trails

Capital expenditures are tracked separately from dedicated Forestry accounts, but still contribute to the overall bottom line of the budget.

Table 11 displays the total budgeted and actual capital expenditures since 2007 (2015 and 2016 are estimated):

Table 11: Total Capital Expense*

Year	Budget	Actual
2007	\$150,000	\$150,000
2008	\$0	\$1,600
2009	\$14,400	\$4,821
2010	\$0	\$1,199
2011	\$15,500	\$41,815
2012	\$41,700	\$31,941
2013	\$120,250	\$36,994
2014	\$8,550	\$272,348
2015	\$86,006	\$77,108
2016	\$74,500	\$74,500
Average	\$51,091	\$69,233

* 2015 & 2016 estimated.

The capital expenses were included to show the total impact of the Forestry and Parks Department on the overall county budget. If capital expenses are included in the overall summary, total budgeted expenditures for 2016 would decrease by a little over 1%, when compared to 2015.

Net Returns: Forestry, Parks and Trails

Table 12 best communicates the overall bottom line: the total budgeted and actual net returns (excluding capital) from the Forestry, Parks and Trails programs from 2007 through 2016 (2015 and 2016 are estimated).

Table 12: Total Budgeted and Actual Net Returns

Year	Budgeted Net Returns			Actual Net Returns			Difference
	Revenues	Expenses	Total Return	Revenues	Expenses	Total Return	Actual - Budget
2007*	\$1,885,971	\$924,556	\$961,415	\$2,494,020	\$1,521,594	\$972,427	\$11,012
2008	\$1,912,971	\$998,087	\$914,884	\$2,837,111	\$1,077,874	\$1,759,236	\$844,352
2009	\$1,918,763	\$1,014,215	\$904,548	\$2,499,613	\$1,060,775	\$1,438,838	\$534,290
2010	\$1,999,655	\$1,094,396	\$905,259	\$2,234,054	\$1,008,669	\$1,225,385	\$320,126
2011	\$2,270,841	\$1,229,697	\$1,041,144	\$2,784,930	\$1,315,186	\$1,469,744	\$428,600
2012	\$2,538,679	\$1,228,777	\$1,309,902	\$2,935,390	\$1,287,323	\$1,648,067	\$338,165
2013	\$2,735,270	\$1,579,162	\$1,156,108	\$4,505,756	\$1,757,629	\$2,748,126	\$1,592,018
2014	\$2,859,607	\$1,473,708	\$1,385,899	\$5,135,700	\$2,069,534	\$3,066,167	\$1,680,268
2015**	\$3,266,036	\$1,713,288	\$1,552,748	\$7,048,090	\$4,617,251	\$2,430,839	\$878,091
2016	\$3,277,970	\$1,707,990	\$1,569,980	\$3,277,970	\$1,707,990	\$1,569,980	\$0
Average	\$2,650,321	\$1,469,877	\$1,180,444	\$3,575,263	\$1,742,382	\$1,832,881	\$652,437

* included land acquisition expenses.

** includes \$2.265 million Stewardship revenue & \$2.62 million land acquisition expense.

Budgeted net returns (or net deposits into the county general fund) for 2016 are expected to reach nearly \$1.57 million, an increase of approximately 1.1% from 2015. This also represents a 45% increase from the average budgeted net returns prior to 2011.

Actual net revenues for 2015 are expected to be around \$2.43 million. This is less than the actual net returns for 2013 and 2014 (both record breaking stumpage revenue years), primarily due to the \$360,000 out of pocket expense associated with the Knowles-Nelson Stewardship Land Acquisition grant, but still nearly \$900,000 more (57%) than the budgeted amount. It is also worth noting that the average actual total net return since 2012 is over \$1.0 million dollars greater than the average actual net return prior to 2011 (an increase of over 83%)!

Also, as previously stated, anticipated stumpage revenues for 2015 are still being conservatively estimated (\$4.25 million). Actual net revenues could be considerably higher, possibly even reaching the \$5.0 million range by the end of the year. If that happens, actual net revenues would approach or exceed \$3.0 million (roughly double the budgeted amount).

Nearly all of this increase is attributed to another banner year in sale of wood revenues, associated with very strong markets for new timber sales (see Table 1). If we continue to see above average prices on new timber sales and continue to sell \$5.0+ million in new sales per year, actual annual stumpage revenues should stay relatively constant (low to mid \$4.0 million). Again, the unpredictability of this actually happening is what drives the conservative future estimates.

PERFORMANCE INDICATORS

The Bayfield County Forestry and Parks Department manages over 169,000 acres of County Forest land, 4 county parks, 437 miles of state funded snowmobile trails, 87 miles of state funded ATV/UTV trails and 168 miles of state funded winter ATV trails, in addition to a plethora of other recreational responsibilities. The recently completed Stewardship Land Acquisition projects will bring the total acres of the County Forest to around 172,000.

The forest management program is one of the most significant responsibilities of the Department and will be the primary focus throughout the rest of this section.

In general, there are three major facets of the forest management program:

1. Forest management (timber sale establishment).
2. Reforestation.
3. Forest reconnaissance.

The quality and quantity of primary goal accomplishments, the sold value of new timber sales and annual stumpage revenues received are some of the best indicators used to evaluate performance. Below are summaries of the major forest management priorities.

- 1) Sustainable harvest goals: Sustainable timber harvest goals for every major forest type are calculated based upon sound silvicultural guidelines and principles.

Table 13 displays the sustainable harvest goals and accomplishments of the timber sale program by major forest type since 2009 (note: 2011 marked the first year with 4 full time foresters):

Table 13: Bayfield County Forest Sustainable Harvest Goals and Accomplishments (acres)

Species	2009		2010		2011		2012		2013		2014		Average	
	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.
Aspen ¹	850	928	870	853	1,189	1,191	1,005	1,230	1,170	1,151	1,265	1,314	1,058	1,111
Nor. Hdwd	900	721	900	418	914	973	1,321	1,349	970	1,069	900	857	984	898
Red Oak	670	554	670	607	808	798	763	577	795	680	700	981	734	700
Paper Birch	200	16	200	156	200	38	100	132	50	15	90	131	140	81
Scrub Oak	85	15	85	167	85	188	140	142	215	254	205	275	136	174
Red Pine	749	572	870	743	978	987	991	917	900	952	880	811	895	830
Jack Pine	405	413	540	518	516	480	504	493	275	274	190	182	405	393
White Pine	50	76	50	15	50	35	100	93	120	169	120	127	82	86
Fir/Spruce	100	33	100	180	100	140	60	25	130	119	40	36	88	89
Swamp Conifer ²	0	0	0	0	142	160	130	138	140	141	120	54	89	82
Swamp Hdwd. ²	0	0	0	0	126	0	120	87	50	41	110	74	68	34
Total	4,009	3,328	4,285	3,657	5,108	4,990	5,234	5,183	4,815	4,865	4,620	4,842	4,679	4,478

¹ Greater accomplishments are a result of managing some of the backlog

² Timber types included in goals starting in 2011

The management goal for 2015 is 4,645 acres, a slight increase when compared to 2014. A total of 4,842 acres of County Forest was managed in 2014. This represents an increase of roughly 40% when compared to the average accomplishments prior to 2011.

The long term sustainable harvest goal is projected to hover between 4,500 to 4,800 acres per year, though may increase slightly with the recent Stewardship Land Acquisition projects (by an average of approximately 100 acres per year). The significant increase in sustainable timber harvest goal accomplishments is a direct result of adding a new forester position in 2011.

Table 14 breaks down the allocation of forest management accomplishments for the sustainable timber harvest program (2015 and 2016 are estimates).

Table 14: Bayfield County Forest Sustainable Harvest Summary (acres)

Year	Management Goal	Timber Sale Establishment	Stand Update ¹	Total Accomplishments
2008	3,511	2,736	573	3,309
2009	4,009	3,157	243	3,400
2010	4,285	3,331	326	3,657
2011	5,108	4,491	499	4,990
2012	5,234	4,588	595	5,183
2013	4,815	4,348	517	4,865
2014	4,620	4,331	511	4,842
2015	4,645	4,181	465	4,645
2016	4,600	4,140	460	4,600
Average	4,536	3,855	466	4,321

¹ Stands are updated, in part, due to inaccuracies in the data or insufficient growth for management.

In general, most of the harvest goal is in the form of a timber sale, however, there are occasions when a stand is updated and managed at a later date. Updates typically occur when a stand has not attained the predicted amount of growth in between harvests, when the data describing the stand is incorrect, or when the stand is removed from management due to a restrictive feature i.e. riparian buffers or inoperable slopes.

The differences in total accomplishments displayed in Tables 13 and 14 are a result of managing non-forested stands i.e. grass or upland brush, which had been previously mistyped. These stands show up in the total accomplishments, but not in the goals developed for forested stands.

Again, note the significant difference in accomplishments starting in calendar year 2011. Total accomplishments have increased by over 40% compared to the average from 2008 to 2010. 2011 marks the first year with the additional forester position (a little over ½ of duties assigned to the recreation forester position, added in 2013, are forest management related).

- 2) Timber sale program: Bayfield County offers two timber sale lettings per year, one in the spring and one in the fall. Table 1 (on page 1) displays the summary of timber sale offerings since 2007 (2015 is an estimate) and describes the total number of sales sold per year, as well as total acres, the total value of the winning high bids, the average bid value per acre and total actual revenues received from the sale of timber.

Since 2011, the Department has increased the amount of timber sale acreage sold by 35% and timber sale bid values by 94%, when compared to averages from 2007 through 2010. During the same time period, actual revenues received from the sale of wood have increased by over 68%.

- 3) Reforestation program: Reforestation is an integral part of forest management. Bayfield County manages one of the largest public land reforestation programs in the state of Wisconsin. The direct seeding of jack pine in the Barnes Barrens Management Area was added to the program in 2013. In general, there will be a decrease in red pine planting and an increase in jack pine seeding over the next decade. As a result, total reforestation costs are expected to remain stable, if not slightly decrease.

However, we are starting to see (and treat) significant infestations of invasive species. Treating invasives is costly and labor intensive, but critical to ensure the growth, production and perpetuation of our desired native species. Increased costs associated with treating invasives have the potential to offset any decreases

we may have seen with the planting/seeding programs. In the end, we may, and most likely will, see an overall increase in reforestation expenses.

In addition, two deer exclusions fences have been installed on the County Forest to monitor the effects that over browsing has on regenerating red oak, paper birch and white pine. The fence sites are located in Iron River and Cable and total 29 and 50 acres, respectively. If we continue to see excessive browsing on these species, there may be a need to install additional deer exclusion fencing.

Table 15 displays the summary of the reforestation program from 2008 through 2015 (2015 is estimated).

Table 15: Bayfield County Forest Reforestation Program Summary (acres)

Year	Planting				Seeding	Site Preparation				Maintenance				Monitoring
	Red Pine	Jack Pine	White Pine	Other ¹	Jack Pine	Trench	Fire Plow	Scarify	Spray	Fire	Spray	TSI ²	Bud Cap	Regen
2008	378	207	24	0	0	796	88	0	442	0	0	0	0	1,683
2009	487	415	0	0	0	726	72	0	348	40	0	0	0	2,652
2010	367	196	0	0	0	363	118	0	420	42	305	0	0	2,183
2011	319	153	35	68	0	900	88	0	186	21	324	0	0	1,424
2012	295	107	274	0	0	0	177	120	727	32	609	0	0	2,736
2013	281	174	92	0	558	264	0	175	0	0	449	2	239	2,522
2014	0	0	0	0	0	506	20	115	264	0	273	0	239	2,929
2015	62	0	124	0	202	621	0	100	655	0	650	50	239	2,500
Avg	274	157	69	9	95	522	70	64	380	17	326	7	90	2,329

¹ In 2011, tamarack and white spruce.

² Timber Stand Improvement - Hand release of established regeneration.

- 4) **Forest Reconnaissance Program:** forest reconnaissance, or updating stand information, is a critical aspect of the forest management program. The development of sustainable annual and long term goals is nearly entirely dependent on the accuracy of information for each stand in the database. Maintaining accurate and up-to-date stand information is essential.

Prior to 2014, the goal has been to update stand information on a compartment by compartment basis. A compartment is a way to block or condense the county forest into more manageable sub-units, and can range from a few hundred to a few thousand acres in size. Starting in 2014, the goal is to collect information on a few select forest types that have been targeted as priorities for management. These types are jack pine, red oak and northern hardwood. Jack pine and red oak were the priorities for 2014. The remaining stands of red oak and northern hardwood will be the priority for 2015.

Table 16 displays the summary of compartment/stand updates from 2009 through 2015 (2015 is estimated):

Table 16: Bayfield County Forest Inventory (acres)

Year	Goal	Accomplishment
2009	10,000	2,872
2010	10,000	4,079
2011	10,000	9,728
2012	10,000	8,135
2013	10,000	9,316
2014	10,000	8,552
2015	12,500	12,500
Average	10,357	7,883

MISSION STATEMENT

The mission of this Department is to manage, conserve and protect the resources of the Bayfield County Forest in a manner that ensures optimum production of forest products together with providing recreational opportunities, wildlife habitat, watershed protection and the stabilization of stream flow. Management practices that focus on sustainability and multiple use will ensure a wide variety of forest products and amenities for current and future generations. Natural resources, such as those provided by the Bayfield County Forest, provide valuable social, economic and environmental benefits that are important to our quality of life.

County Forest resources will also be managed to minimize adverse effects from natural catastrophes such as fire, insect and disease outbreaks, and from human threats such as encroachment, over utilization, environmental degradation, and excessive development.

Management of the County Forest must also balance local needs with broader ecological concerns through the integration of forestry, wildlife, fisheries, endangered species protection, water quality, soil capability, and recreational opportunities. Multiple use management provides the assurance of maximum public benefit.