

## Conservation Partners Legacy Grant Application

**CPL1000078**

[Spreadsheet](#)

### Name and Contact

Project Identifier:	CPL1000078	Street Address 1:	Land Services Building
Project Name:	Crow Wing County Jack Pine Restoration	Street Address 2:	322 Laurel Street, Suite #12
Organization Name:	Crow Wing County	City:	Brainerd
Organization Website:	<a href="http://www.co.crow-wing.mn.us/land/index.html">http://www.co.crow-wing.mn.us/land/index.html</a>	State:	MN
Organization Contact Person:	Jacob A. Frie	Zip Code:	56401
Contact Email:	<a href="mailto:jacob.frie@co.crow-wing.mn.us">jacob.frie@co.crow-wing.mn.us</a>		
Contact Phone:	218-824-1115		

### Location

Primary County:	Crow Wing
Nearest City:	Brainerd and Fort Ripley
Township:	Crow Wing and Fort Ripley
Project Site Name:	#1 and #2
Project Site Land Ownership:	County
Other Land Ownership:	N/A

### Project Information

Primary Activity:	Restoration
Primary Habitat Type:	Forest
Total Project Acres:	45
Total Project Sites:	2
Total Grant Amount Requested:	\$25085
Total Match Amount:	\$5326
Total Project Cost:	\$25085
Project Completion Date:	07/2012 (MM/YYYY)

**Project Summary and Outcomes:** The concept is to restore approximately 45 acres of jack pine habitat within Crow Wing County. The scope of the project covers all aspects of restoration from site-preparation, to planting, to protection, and finally survival/regeneration surveys. The expected outcome is the restoration of jack pine on the landscape. This project will be successful if >75% stocking levels are achieved. Continued monitoring of the project sites will continue after the 2012 fiscal year (end of funding).

---

### Attachments

- [Project Site Information Form](#)
- [Project Budget and Match Description](#)
- Partner Commitment Letter
- Financial Documentation
- Conservation Easement
- [Supplementary Attachment #1](#)
- [Supplementary Attachment #2](#)

---

[Back](#)

# Conservation Partners Legacy Grant Program

## Project Site Information

**Contact information**

Project name: 

Crow Wing County Jack Pine Restoration
----------------------------------------

Organization: 

Crow Wing County
------------------

Organization contact person (Project Manager): 

Jacob A. Frie
---------------

**Project information**

Project site: 

Inv. stand #s: 5 and 30
-------------------------

Project site land manager or easement holder: 

Legal :	T44	R31	S21	QNE
Crow Wing County Natural Resource Management Division				

Private land owner County: 

Crow Wing
-----------

(if applicable): 

N/A
-----

Activity (may choose more than one):  Enhancement  Restoration  Acquisition

Predominant Habitat (choose one):  Forest  Prairie  Wetland  Fish, Game and Wildlife Habitat

Activity quantity: 

23
----

 Acres  Miles  Feet  Structures  Wetlands

Project Site #2, if needed.

Project site: 

Inv. stand #s: 5,6, and 8
---------------------------

Project site land manager or easement holder: 

Legal :	T43	R32	S23	QE1/2
Crow Wing County Natural Resource Management Division				

Private land owner County: 

--

(if applicable): 

--

Activity (may choose more than one):  Enhancement  Restoration  Acquisition

Predominant Habitat (choose one):  Forest  Prairie  Wetland  Fish, Game and Wildlife Habitat

Activity quantity: 

22
----

 Acres  Miles  Feet  Structures  Wetlands

Project Site #3, if needed. Use Additional Project Sites form if needed.

Project site: 

--

Project site land manager or easement holder: 

Legal :	T	R	S	Q

Private land owner County: 

--

(if applicable): 

--

Activity (may choose more than one):  Enhancement  Restoration  Acquisition

Predominant Habitat (choose one):  Forest  Prairie  Wetland  Fish, Game and Wildlife Habitat

Activity quantity: 

--

 Acres  Miles  Feet  Structures  Wetlands

**Project timeline:**

Time frame	Goal	Time frame	Goal
1.) Fall, 2009	Site prep (trench) site #2 (Fort Ripley Township)...[recently completed].		
2.) Spring, 2010	Plant (jack pine) site #2 (Fort Ripley Township)		
3.) summer/fall, 2010	Collect jack pine seeds from seed orchard.		
4.) summer/fall, 2010	Regeneration survey of site #2		
5.) Fall, 2010	Site prep (trench) site #1 (Crow Wing Township)		
6.) Fall, 2010	Bud capping and Plant Skydd application of site #2		
7.) Spring, 2011	Plant (jack pine) site #1 (Crow Wing Township)		
8.) Summer, 2011	Regeneration survey of site #1		
9.) Fall, 2011	Bud capping and Plant Skydd application of sites #1 and 2		

**Project description and benefits (box will expand as typed into, not to be longer than 2 pages):**

Project title and brief description:

The title of this project is Crow Wing County Jack Pine Restoration. The plan is to restore (plant) approximately 45 acres of jack pine habitat in priority areas within Crow Wing County.

Background problem:

Jack pine is decreasing rapidly across the landscape, especially compared to its historic presettlement vegetation levels. Records indicate that 15% of Crow Wing County (CWC) was in conifer covertype in presettlement conditions. By the end of the late 1990's, that number has shrunk to just over 4%. On CWC administered/managed land, the amount of jack pine covertype acres has shrunk by an astonishing 70% in the last 12 years (from 1997 to 2009) from almost 1,500 acres to just over 425 acres. A combination of large-scale influences have occurred over the last 100 years to create these conditions. First, human encroachment and subsequent need for fire suppression to protect real estate investments has reduced the chances of jack pine's principal means of establishment: fire. Second, a drastic increase in local deer populations and densities have made jack pine an easy and nutritious target for herbivory. Lastly, as a result of challenges regenerating jack pine, CWC has, over the last 5 years, begun to switch its planted species to one that may not be best suited for the site, but instead resistant to deer and small mammal browse. This has the potential for drastic ecological influences over the landscape (i.e., matching the best/most appropriate species at the site level).

The importance and benefits of jack pine on the landscape:

Jack pine barrens and forests provide important habitat for primarily forest edge and shrub transitional species. Important Minnesota birds that abide in jack pine habitat include the Connecticut Warbler, the Nashville Warbler, and the Black-Billed Cuckoo. Small mammals include red squirrels, red-backed voles, and white-footed mice. Because both sites have aspen and oak inclusions within the plantable area, the area is well-suited for a variety of wildlife, and the effect of a monoculture "plantation" feel will be mitigated. The Minnesota Forest Resources Council's (MFRC) Landscape Program, specifically the North Central Landscape Committee, stated in their objectives for the dry-mesic pine-oak ecological system that jack pine is to be established in the young age classes. Also, in the Mille Lacs Uplands Subsection planning efforts with the Minnesota DNR, the goals are to "maintain" current levels of jack pine over the landscape. Currently, two landtype associations within the subsection that occur in CWC have declining jack pine covertype numbers. This planting project will serve to increase jack pine to more normal conditions. The CWC Management Plan (circa 2000) specifies that jack pine will be planted when/after it is harvested. Lastly, jack pine is a commercially diverse species, used for biomass, pulpwood, lumber, telephone poles, railroad ties, and orient strand board. As the stand approaches "rotation age" (apx. 60 yrs. old), management strategies will focus on silvicultural tools that promote natural seeding methods as a principal regeneration strategy.

Why this project will succeed (i.e., good things CWC has going for it to make this a success):

The CWC Natural Resource Management Division is a member of the Minnesota Tree Improvement Cooperative (MTIC). The MTIC and CWC have a shared goal of selecting and breeding trees which grow faster, have better form, and are more disease resistant than those which currently exist. In addition to having active membership in the MTIC, CWC has two jack pine seed orchards in the county means that CWC is in a great position to grow outstanding jack pine. The seeds will be (have been in the past) collected from this "local" ecotype source for planting. The project areas exist in low nutrient fire dependant plant communities (i.e., FDC23 and FDC25) which support jack pine as a dominant species in the community. The presettlement vegetation records indicate that the area to be planted consisted of jack pine barrens and oak openings. This provides evidence that jack pine is the appropriate species for the site. CWC has in place plans for protection of the seedlings once they are planted. Several options exist, including bud caps, mesh tubes, and the deer repellent "Plant Skydd." One or more of these protection measures will be applied during the first fall after spring planting as a protection of the investment. In order to ensure adequate stocking and survival of planted seedlings, natural resource management staff will perform survival checks after the first and fifth growing seasons at a minimum. By performing the checks, the division will statistically know how successful the project was and what modifications can

be made to future similar projects to ensure success.

**Please provide the answers to the following questions. Boxes will expand as typed into.**

**1. For lands acquired in fee title that will be turned over to a public agency for long-term management:**

- a. Provide a description of the work necessary to bring the land up to agency standards and an estimate of the associated cost.

N/A

- b. What short- and long-term work is required to manage the land you acquire?

N/A

**2. For enhancement/ restoration projects on public lands:**

- a. Who is/will be the long-term manager for the project site?

The Crow Wing County Natural Resource Management Division (tax forfeited land).  
Jacob A. Frie, Natural Resource Manager, will be the grant administrator for this project.

- b. What short- and long-term maintenance work is required to sustain the habitat work you will do?

All the activities listed in the application including: site preparation (trenching), protection (bud caps, deer repellent), and regeneration surveys (survival checks).

- c. Who will complete this maintenance work, and how will it be funded?

The maintenance (bud capping, trenching, etc.) will be performed by a combination of contracted staff and NRM staff, depending on the management activity.

- d. Will the CPL funds supplant any existing funds?

The funds will ensure the restoration efforts are pursued for these management efforts. Because of the of the seed orchards, great sandy soil, and historic range of jack pine, Crow Wing County has budgeted dollars for planting in the past. However, with the sharp reduction in jack pine covertype acres since 1997 (down 70%) on CWC managed land, current dollars/efforts will not be sufficient to add enough acres of jack pine covertype without additional sources of funding.

As required by 2009 MN Session Law, Chapter 172 subd. 10 (8), "any agency or entity receiving an appropriation must, for any project funded in whole or in part with funds from the appropriation, give consideration to and **make timely written contact with the Minnesota Conservation Corps** for consideration of possible use of their services to contract for restoration and enhancement services". Contact MCC at [cplg@conservationcorps.org](mailto:cplg@conservationcorps.org), or email a copy of this form to the same address. For more information on costs, crew capabilities, etc., visit MCC's website at <http://www.conservationcorps.org/useacrew.html>.

**Signature:**

I certify that I have read the Conservation Partners Legacy Grants Program **Request for Proposal, Program Manual** and other program documents, and have discussed this project with the appropriate public land manager, or private landowner and easement holder. I am authorized to apply for and manage these grant and match funds, and the project work by the organization or agency listed below. I have made timely written notification to MCC regarding my restoration or enhancement project.

Signature: Jacob A. Frie	Organization/ Agency: Crow Wing County
Title: Natural Resource Manager	Date: 11/03/2009

**Please save this document to your computer or electronic storage device and attach this document as specified on the online submittal form when ready to apply. Contact [CPL Grant Staff](#) with any questions.**

## Conservation Partners Legacy Grant Project Budget and Match Worksheet, Application Requirement

---

Project name:	Crow Wing County Jack Pine Restoration	
Organization:	Crow Wing County	
Organization contact person (Project Manager):	Jacob A. Frie	

Please complete all sections and be as detailed as possible for all descriptions under the Details sections. Limit entries in large tables to numbers only, **round to the nearest dollar**. Do not edit table categories, only enter values or text into the table. The tables will adjust to accommodate additional text in each box. If all categories are not needed, please leave those fields blank.

**BUDGET:** amounts being requested \*\*Note: FY refers to State Fiscal Year: July 1- June 30, with the year reflecting the year that June falls in. For example: if today were September 3<sup>rd</sup>, 2009 it would be FY2010; December 3<sup>rd</sup> 2010= FY2011; May 2012= FY2012

Budget Item	Fiscal Year 2010	Fiscal Year 2011	Fiscal Year 2012	Total
<b>Personnel</b>				
<b>Contracts</b>	<b>\$2,926.00</b>	<b>\$5,082.00</b>	<b>\$4,139.00</b>	<b>\$12,147.00</b>
<b>Grant Administration</b>	<b>\$64.00</b>	<b>\$192.00</b>	<b>\$128.00</b>	<b>\$384.00</b>
<b>Administration/ Environmental Compliance</b>	<b>\$896.00</b>	<b>\$1,472.00</b>	<b>\$608.00</b>	<b>\$2,976.00</b>
<b>Fee Acquisition</b>				
<b>Easement Acquisition</b>				
<b>Easement Stewardship</b>				
<b>Equipment/Tools/Supplies</b>	<b>\$3,960.00</b>	<b>\$4,549.00</b>	<b>\$841.00</b>	<b>\$9,350.00</b>
<b>Travel</b>	<b>\$44.00</b>	<b>\$125.40</b>	<b>\$59.40</b>	<b>\$228.80</b>
<b>Additional Budget items</b>				
<b>Total</b>	<b>\$7,890.00</b>	<b>\$11,420.40</b>	<b>\$5,775.40</b>	<b>\$25,085.80</b>

**DETAILS:** detail the amounts listed in the above table.

**Personnel Details:**

Name	Title	Amount
N/A	N/A	\$0.00

**Contract Details:**

Contractor Name	Contracted Work	Amount
Protection	Bud capping + deer repellent (Plant Skydd)	\$6,163.00
Planting	Planting jack pine seedlings	\$2,429.00
Site preparation	Trenching (heavy equipment...skidder)	\$3,555.00

**Grant Administration:**

<b>Administrative Activity</b>	<b>Description/ Amount</b>	<b>Amount</b>
Grant administration	Documenting work performed, tracking costs, filing papers, etc.	\$384.00

**Administration/ Environmental Compliance**

<b>Activity</b>	<b>Description</b>	<b>Amount</b>
Planting	Making sure the tree planters are not j-rooting, missing rows, etc.	\$2,380.00
Protection	Making sure the bud cappers are capping all designated trees, that the caps are stapled on correctly, that the Plant Skydd was applied appropriately and completely, etc.	\$298.00
Site preparation	Ensuring that the disk trencher is properly spacing the trenches, that the disk trencher is digging deep enough (or not too deep) into mineral soil.	\$90.00
Regeneration checks	After the 1 <sup>st</sup> growing season, ensuring the vigor and growth of planted seedlings. Minimum stocking level is 75%.	\$208.00

**Fee Acquisition/ Easement Acquisition/ Easement Stewardship Details:**

N/A
-----

**Equipment/Tools/Supplies Details:**

<b>Item</b>	<b>Use</b>	<b>Amount</b>
Tree seedlings (jack pine)	These are the trees to be planted on-site. They are grown at PRT in Drydon, Canada.	\$8,098.00
Bud caps (3"x5")	Office paper-type bud caps used to protect the terminal bud of each tree seedling. Prevents deer browse.	\$180.00
Deer repellent	Plant Skydd (trade name) chemical used to repel potential deer browse.	\$1,072.00

**Travel Details:**

<b>Miles</b>	<b>Purpose</b>	<b>Amount</b>
416	Travel by NRM staff to site #s 1 & 2 for administration and regeneration checks from 2010-'12 fiscal years (@ \$0.55/mi).	\$228.80


**Additional Budget Items Details:**

None. "purpose" should be suffice.

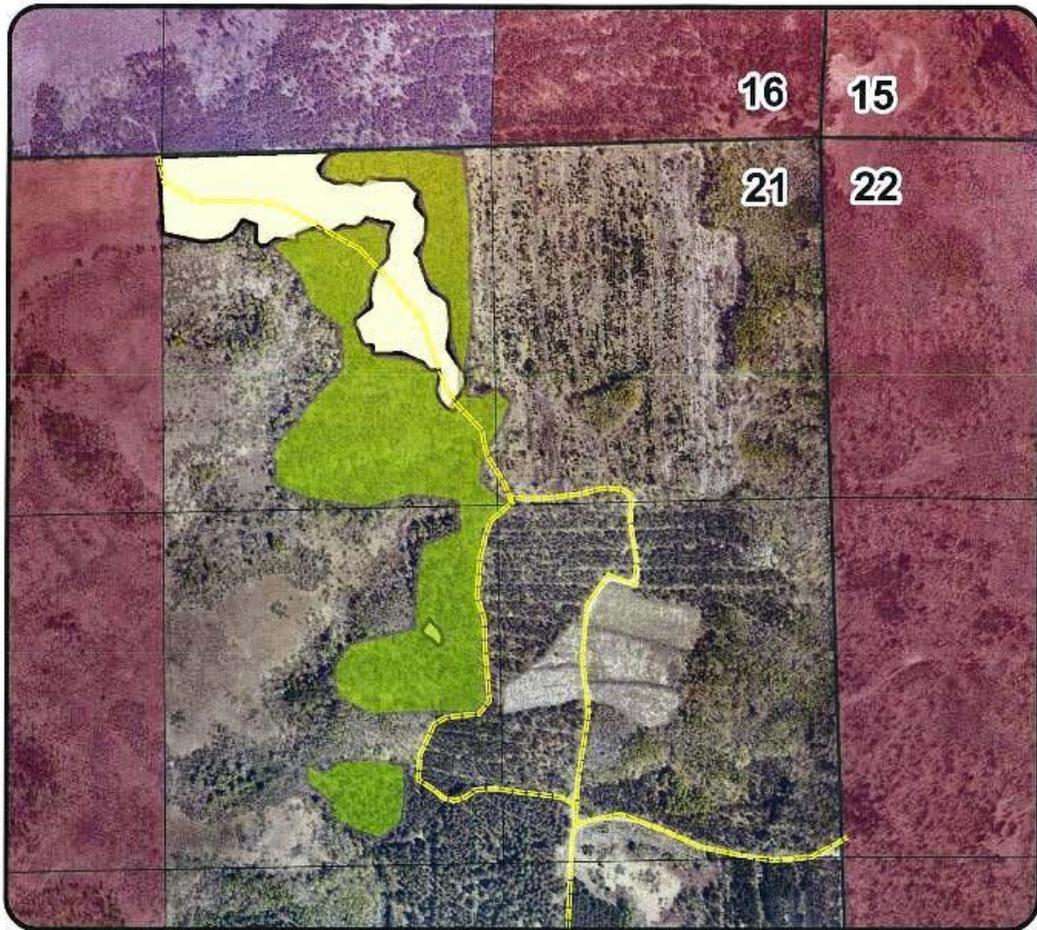
**MATCH:** Required 10% of total project funds, to be fulfilled by end of Fiscal Year 2012. Use provided rate sheet to determine unit rate and total value of in-kind services to be used as matching funds if applicable.

Source	Description	Units	Unit Rate	Total Value
Site Preparation	Site #2 trenching project in Fort Ripley Township (completed in fall, 2009).	22 acres	\$79/acre	\$1,738.00
Travel	Travel by NRM staff to site #s 1 & 2 for all administration and regeneration checks from 2010-'12 fiscal years.	416 miles	\$0.55/mile (maint. + fuel)	\$228.80
Grant administration	Documenting work performed, tracking costs, filing papers, etc.	12 hrs	\$32/hour (wage + fringe)	\$384.00
Administration/Environmental compliance	Monitoring planting, protection, site-preparation, and performing regeneration checks	93 hrs	\$32/hour (wage + fringe)	\$2,976.00

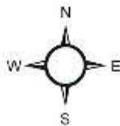
**Matching description/ comments:** if needed

**None. The "description" should be suffice.**

**Planting site for : Crow Wing Township, Crow Wing County  
Section 21 (Apx. 23 acres) - site #1**



0 260 520 1,040 Feet



**Legend**

— Forest trails (2008)

▭ Sections

▭ Parcel Data

▭ Planting area

▭ Reserve area

**Ownership**

▭ PRIVATE

▭ STATE

1 inch equals 519 feet

Crow Wing County  
Natural Resource Management Division  
322 Laurel Street, Suite #12

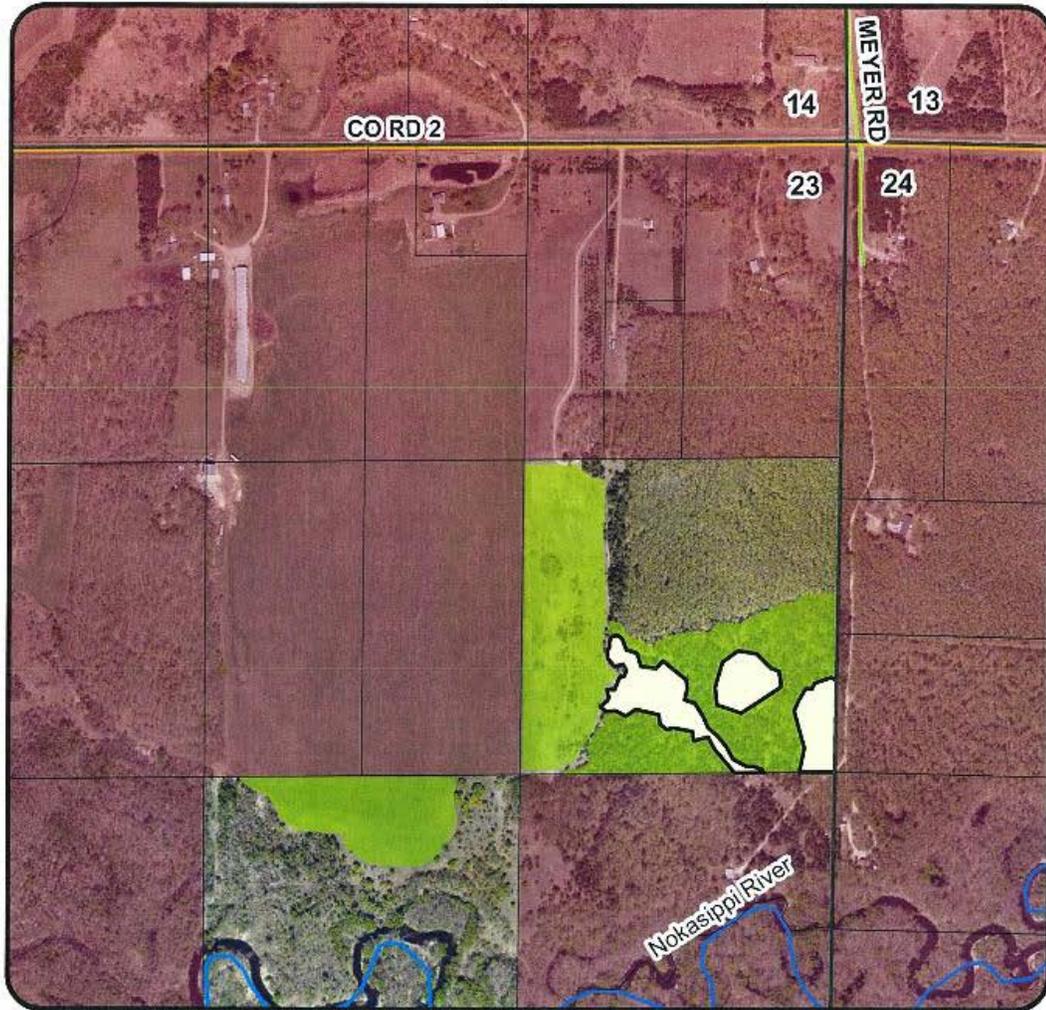
For non-legal, reference use only

11/03/2009

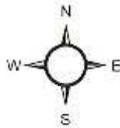
Crow Wing County Coordinates (projection) ArcGIS 9.2

218-824-1115

**Planting site for: Fort Ripley Township, Crow Wing County**  
**Section 23 (apx. 22 acres) - Site #2**



0 295 590 1,180 Feet



**Legend**

- Sections
  - Parcel Data
  - Planting area
  - Reserve area
  - Streams and rivers
- OWNER\_TYPE**
- PRIVATE

1 inch equals 589 feet

Crow Wing County  
 Natural Resource Management Division  
 322 Laurel Street, Suite #12

For non-legal, reference use only

10/21/2009

Crow Wing County Coordinates (projection) ArcGIS 9.2

218-824-1115