Dune Acres Town Council

September 10, 2009

Grant Pre-Proposal Requests

Authorization to Submit Pre-Proposals

1.) Grant: Lake Michigan Coastal Program Grant, *Small Planning Grant*
EXPORATORY RESTORATION OF CLUBHOUSE DUNE

Total Grant Program Amount: $7,200
Funding Sources: $3,600 LMCP
$2,600 Match; in-kind – D.A. Environ Comm. as Project Manager
$1,000 Match; cash – Town of Dune Acres

Timeline: 2010

Description: Save the Dunes Land Project Manager will prepare a plan for restoration of Clubhouse dune.

2.) Grant: Lake Michigan Coastal Program Grant, *Small Construction Project*
RESTORATION OF DA TOWN PARK F, EAST ROAD AND LUPINE LANE

Total Grant Program Amount: $6,400
Funding Sources: $3,200 LMCP
$2,200 Match; in-kind – D.A. Environ Comm. as Project Manager
$1,000 Match; cash – Town of Dune Acres

Timeline: 2010-2011

Description: Remove invasives on town park tract F.

3.) Grant: Lake Michigan Coastal Program Grant, *Small Construction Project*
NATIVE SPECIES ESTABLISHMENT IN DUNE ACRES-COWLES BOG

Total Grant Program Amount: $29,863
Funding Sources: $14,900 LMCP
$ 4,000 Match; in-kind – The Nature Conservancy
$ 8,000 Match; cash – Shirley Heinze Foundation
$ 2,963 Match; cash – Dune Acres Civic Foundation Designated Gift

Timeline: 2010-2011

Description: Native species establishment in 26-acre Cowles Bog parcel owned by Town of Dune Acres. (Continues restoration work begun in 2009-2010 LMCP grant.)

Indiana Lake Michigan Coastal Program
Coastal Grants Program
Small Scale Grant Application

Before You Begin – Please Read the Small Scale Grant Funding Guidance

1. Type of Project and Corresponding Project Objective: (choose one)

☐ **Outreach / Education (§306)**

☒ **Resource Management (§306)**

2. Project Title: Exploratory Restoration of Clubhouse Dune. Dune Acres, IN

3. Organization applying: Town of Dune Acres

Select Type of Organization: Unit of local government

4. Contact Person and Address:

Cathryn V. Bomberger

16 Gleneagles Drive — 1 Circle Drive

Schererville, IN 46375 — Dune Acres, IN 46304

Phone: 219-322-3170, 219-787-8569 **Fax:**

Fax: 219-972-2404

Email: cathybomb@aol.com

5. County where project is located: (select all that apply)
Porter County County 2 County 3

6. Total Project Cost: $7,200.00

7. LMCP Share: $3,600.00

8. Applicant Share: $3,600.00

9. Brief Summary of the Project (300 word maximum): Erosion and loss of native plant life have endangered the Clubhouse Dune, a focal point in the town of Dune Acres. The growth of a dense canopy of overhanging trees also appears to enhance the problem. This proposal outlines the development of a master plan to use as a guiding document for future implementation projects for dune restoration. Clubhouse Dune covers approximately 15 acres. The highest area is 744 feet. The incline of the dune is a crippling variable, above 50% slope in some areas. This creates an unknown challenge in the restoration of the steep, heavily canopied area. This natural area contains a number of important, and in some cases, rare plant species, such as pitcher's thistle and wafer seed, which only grows in Indiana by Lake Michigan. There is evidence of good grasses such as sand reed, rye grass, fescues and brooms, as well as little blue stem and marram grass, thimbleweed, milkweed, spiderwort, cactus, lupine, puccoon, serviceberry, monardia, bee balm and choke cherry. However, the area also harbors increasing numbers of invasive, non-native species which threaten the native plant growth and become seed sources for the dissemination of non-native species. Black locust and tree of heaven are abundant. Oriental bittersweet and mugwort also need to be removed. Roads at the base of the slope define the project area. The plan will aim to control erosion, to control shading, to encourage native vegetation and to provide for maintenance of the work accomplished. Implementation plans will also be incuded in the project. Plant inventories and tree and light assessments will need to be defined. Save the Dunes has agreed to partner with the Town of Dune Acres to write this plan. Students will be included for field trips and hands-on work when appropriate.

10. Project Tasks, Timeline, and Deliverables
a. Complete the Project Timeline Form (1 – 1 ½ page maximum) found on Page 3
b. Include a list project deliverables, work products or measurable results

11. Watershed Location: Hydrologic Unit Code (HUC)

Select 8 or 11-Digit HUC: 04040001 Lake Michigan

Insert 14-Digit HUC here:

Indiana Lake Michigan Coastal Program
Coastal Grants Program
Small Scale Grant Application

12. Preliminary Project Budget
Provide an estimated breakdown of the proposed project budget using the following table.

Category	LMCP Request	Match: Cash	Match: In-Kind	Total
Personnel		$1,000.00	$2,600.00	$3,600.00
Fringe				$0.00
Travel				$0.00
Supplies				$0.00
Contractual	$3,600.00			$3,600.00
Construction				$0.00
Equipment (>$5,000)				$0.00
Signage				$0.00
Other				$0.00
				$0.00
				$0.00
				$0.00
Totals	**$3,600.00**	**$1,000.00**	**$2,600.00**	**$7,200.00**

13. Budget Description
a. Describe the use of FEDERAL FUNDS REQUESTED.
b. Describe the commitment/source of NONFEDERAL matching funds.

a. Federal Funds will be used to pay Save the Dunes Land Project Manager to write the restoration plan.

b. Match in-kind will be the volunteer work of the project administrator, Dune Acres Environmental Commissioner. Volunteer residents will help clear invasive species at planned town cleanup. Educational component will include teachers and students who participate in volunteer programs. Participation at informational meetings held for the town residents will also contribute to match in kind. In addition the town supports the project with $1,000.00 cash match.

14. Acceptance of the terms of the Grant Guidance

"I have read and accept the terms of the Lake Michigan Coastal Grants Program Small Scale Grant Funding Guidance"

Signature _____ Date _____

Project Timeline

Project Title: Exploratory Restoration Plan of Clubhouse Dune, Dune Acres, IN

Applicant: Town of Dune Acres, IN

Project Timeline: Start Date, 01/10/2010– End Date, 07/10/2010

Project Summary: *Clubhouse Dune, a focal point of the Town of Dune Acres, is a site for restoration. There is a need for thinning the understory, opening the canopy and reestablishing growth of native plants to control erosion. It is important to develop a plan to protect and enhance the natural resources as well as to accommodate education because work has not been done before on such a steep incline. Save the Dunes has agreed to partner this project and write the exploratory restoration plan.*

TASK ONE: Project Implementation
January 2010 – July 2010
1. Attend start-up meeting with LMCP Program Specialist
2. Work with Save the Dunes Land Project Manager
3. Complete plant inventories, tree and light assessments
4. Contact educators to plan student trips to the field

TASK TWO: Public Outreach
January 2010 – July 2010.
1. Educational program with residents describing the project
2. Plan spring town cleanup for residents involvement
3. Keep photo diary of dune in different seasons
4. Submit articles in town newsletter

TASK THREE: Administration
January 2010 – July 2010
1. Submit Quarterly Progress and Financial Reports to LMCP Program Specialist
2. Work with Save the Dunes Land Project Manager
3. Coordinate education program

Work Products
1. Restoration Plan for Clubhouse Dune
2. Dune Restoration Plan to use for future projects
3. News articles provided
4. Educational program for residents and students

Indiana Lake Michigan Coastal Program
Coastal Grants Program
2010 Funding Cycle Pre-Proposal

Before You Begin – Please Read the 2010 Funding Cycle Pre-Proposal Guidance

1. Project Category and Corresponding Project Type: (red indicates funding priority)

(§306) Planning / Coordination / Management
- ☐ **Sustainable Land Use Planning**
- ☐ Cultural / Historic Area Planning
- ☐ Conservation Planning for Ecosystem Protection
- ☐ Public Access Site Planning

(§306) Education / Outreach
- ☐ **Coastal Resources Youth Education Programs**
- ☐ Natural / Cultural / Historic Education / Awareness
- ☐ Visitor Use Impacts on Natural Resources
- ☐ Coastal Water Quality Protection/Improvement

(§306) Applied Research
- ☐ **Coastal Resource Protection Economic Analysis**
- ☐ Effects of Open Space Preservation
- ☐ Historic / Cultural Resource Research
- ☐ Health of Coastal Ecosystems

(§306a) Low Cost Construction
- ☐ **Public Access to Streams and Wetlands**
- ☐ Riparian / Streambank Restoration
- ☒ Habitat Restoration
- ☐ Cultural / Historical Restoration

(§306a) Acquisition
- ☐ **Riparian Habitat Protection**
- ☐ Contiguous Coastal Habitat Protection
- ☐ Public Access Sites
- ☐ Cultural / Historic Preservation

(§306) Emerging Issues:
- ☐ **Coastal Hydrology, Flooding, Groundwater**
  - ☐ Planning/Coordination/Management
  - ☐ Education/Outreach
  - ☐ Applied Research
- ☐ Green Jobs
  - ☐ Planning / Coordination/Management
  - ☐ Education / Outreach
  - ☐ Applied Research

2. Project Title: Restoration of Dune Acres Town Park F, East Road and Lupine Lane

3. Organization applying: Town of Dune acres

Select Type of Organization: Nonprofit organization (501(c)(3)

4. Application Contact Person and Address:

Name/Title: Cathryn V. Bomberger

Address: 16 Gleneagles Drive — 1 Circle Drive

Schererville, IN 46375 — Dune acres, IN 46304

Phone: 219-322-3170 — **219-787-8569**

Fax: 219-972-2404 — **Fax:**

Email: cathybomb@aol.com

5. County where project is located: (select all that apply)
Porter County County 2 County 3

6. Total Project Cost: $$6,400.00

7. LMCP Share: $$3,200.00

8. Applicant Share: $3,200.00

Indiana Lake Michigan Coastal Program
Coastal Grants Program
2010 Funding Cycle Pre-Proposal

9. Brief Summary of the Project: (text box will expand)

The objective of this project is to clear the invasive growth from Town Park F to nurture the growth of native plants. Some native plants in the sedge meadow or fern marsh of the park area include purple false foxglove, blue joint grass, buttonbush, round-leaved sundew, marsh shield fern, autumn sedge-fimbry, St. John's wort, monkey flower, meadow beauty, hardhack, steeplebrush and lance-leaved violet. There is a mild amount of sphagmun at the edge and some very nice marsh to the east with some good plants. These plants may, in the proper sunlight, recolonize the now disturbed area after restoration, thus promoting preservation of the flora native to Indiana. This project will also protect the biologically rich Howes Prairie natural area in adjacent National Park land from the invasion of invasive species. Howes Prairie is within one of the richest biodiversity units of the Indiana Dunes National lakeshore so it is very important to preserve and conserve it. This project will provide a good example of restoration of native flora after invasive species removal. Since it is a very visible area, it is a great "best practice" land management demonstration to motivate other property owners to do the same. Students may be involved for field work and educational field trips. Residents volunteer to help during town cleanup event.

10. Consistency with and implementation of area planning efforts: Describe how this project addresses a high priority need as identified in **state/regional recognized plans or local planning efforts**. Please attach a copy of the relevant section, reference information and/or website location.

The organization of a Cooperative Weed Management Area in Northwest Indiana confirms the importance of effective outreach and education to protect the biodiversity throughout a habitat.

Will this project result in an application to the Regional Development Authority (RDA) or is connected to an existing RDA application or project? ☐ **YES** ☒ **NO**

11. Watershed Location: Hydrologic Unit Code (HUC)

Select 8 or 11-Digit HUC: 04040001 Lake Michigan

Insert 14-Digit HUC here:

12. Preliminary Project Budget

Provide an estimated breakdown of the proposed project budget using the following table.

Category	LMCP Request	Match: Cash	Match: In-Kind	Total
Personnel			$2,200.00	$2,200.00
Fringe				$0.00
Travel				$0.00
Supplies	$200.00			$200.00
Contractual	$3,000.00	$1,000.00		$4,000.00
Construction				$0.00
Equipment (>$5,000)				$0.00
Signage				$0.00
Other				$0.00
				$0.00
				$0.00
				$0.00
Totals	**$3,200.00**	**$1,000.00**	**$2,200.00**	~~$12,800.00~~ 6400

13. Budget Description

a. Describe the use of FEDERAL FUNDS REQUESTED.

To pay botanist and helper contracted to use power brushcutter and hand work to cut invasive woody shrubs, vines and trees, and to use appropriate herbicide on stumps. The native flora may restore itself, with the help of added seeds and plugs, if necessary.

b. Describe the commitment/source of NONFEDERAL matching funds.

The Environmental Commissioner will oversee the project and encourage educational field trips and student participation when appropriate. Town residents will volunteer during town cleanup and attend information meeting to learn about the project.

14. Project Location Map: Attach to the application a topographic or GIS based map and/or aerial photos clearly showing the proposed project location or area if applicable to your project

15. Acceptance of the terms of the Grant Guidance

"I have read and accept the terms of the Lake Michigan Coastal Grants Program 2010 Funding Cycle Pre Proposal Guidance document."

Signature _____ Date _____

New Applicant to LMCP Grant Program?: ☒ **Yes** ☐ **No**

Indiana Lake Michigan Coastal Program
Coastal Grants Program
2010 Funding Cycle Pre-Proposal

Project Timeline

Project Title: Restoration of Dune Acres Town Park F, East Road and Lupine Lane

Applicant: Town of Dune Acres

Project Timeline: Start Date: July 1, 2010 – End Date: June 30, 2011

Project Summary: We will eliminate an infestation of mature oriental bittersweet, autumn olive, glossy buckthorn and multiflora rose from a natural area, Dune Acres town Park F, that is adjacent to the Indiana Dunes National Lakeshore. These seeding invasive species threaten the well known and highly biodiverse Howes Prairie, a part of the National Park.

TASK ONE: Project Implementation
July 2010 – June 2011

1. Attend start up meeting with LMCP Program Specialist.
2. A contractor will be hired to work on eliminating invasive plants and herbicide stumps.
3. Contact educators.
4. Complete plant inventory and order plants and seeds if necessary.

TASK TWO: Public Outreach
July 2010 – June 2011

1. Plan an educational program for residents describing the project.
2. Organize work session for residents.
3. Keep photo diary of project.
4. Contact educators to arrange for student field trips and participation when appropriate.
5. Send articles to town newspaper.

TASK THREE: Administration
July 2010 – June 2011

1. Hire personnel.
2. Provide progress reports.
3. Provide finance reports.
4. Coordinate education programs.
5. Monitor work.

Work Products:

1. The restoration of about 1.5 acres of marsh to a healthy natural area..
2. Protection for adjacent Howes Prairie from invasive species.
3. Prevention of flooding with improved native plant growth.

Indiana Lake Michigan Coastal Program
Coastal Grants Program
2010 Funding Cycle Pre-Proposal

Before You Begin – Please Read the 2010 Funding Cycle Pre-Proposal Guidance

1. Project Category and Corresponding Project Type: (red indicates funding priority)

(§306) Planning / Coordination / Management
- ☐ **Sustainable Land Use Planning**
- ☐ Cultural / Historic Area Planning
- ☐ Conservation Planning for Ecosystem Protection
- ☐ Public Access Site Planning

(§306) Education / Outreach
- ☐ **Coastal Resources Youth Education Programs**
- ☐ Natural / Cultural / Historic Education / Awareness
- ☐ Visitor Use Impacts on Natural Resources
- ☐ Coastal Water Quality Protection/Improvement

(§306) Applied Research
- ☐ **Coastal Resource Protection Economic Analysis**
- ☐ Effects of Open Space Preservation
- ☐ Historic / Cultural Resource Research
- ☐ Health of Coastal Ecosystems

(§306a) Low Cost Construction
- ☐ **Public Access to Streams and Wetlands**
- ☐ Riparian / Streambank Restoration
- ☒ Habitat Restoration
- ☐ Cultural / Historical Restoration

(§306a) Acquisition
- ☐ **Riparian Habitat Protection**
- ☐ Contiguous Coastal Habitat Protection
- ☐ Public Access Sites
- ☐ Cultural / Historic Preservation

(§306) Emerging Issues:
- ☐ **Coastal Hydrology, Flooding, Groundwater**
  - ☐ Planning/Coordination/Management
  - ☐ Education/Outreach
  - ☐ Applied Research
- ☐ Green Jobs
  - ☐ Planning / Coordination/Management
  - ☐ Education / Outreach
  - ☐ Applied Research

2. Project Title: Native Species Establishment in Dune Acres-Cowles Bog

3. Organization applying: Town of Dune Acres

Select Type of Organization: Unit of local government

4. Application Contact Person and Address:

Name/Title: Jeannette E. Bapst Town of Dune Acres Environmental Committee

Address: 10 Crest Drive Chesterton, IN 46304

Phone: 219-242-1055 **Fax: NA**

Email: jbapst@griffith.K12.in.us

5. County where project is located: (select all that apply)

Porter County County 2 County 3

6. Total Project Cost: $29,863

7. LMCP Share: $14,900

8. Applicant Share: $14,963

9. Brief Summary of the Project: (text box will expand)

Great Marsh is an inter-dunal peat base wetland in a dune-beach complex less than one-mile from Lake Michigan. The wetland sits between two large dune systems. The southern perimeter is delineated by the Calumet Dunes, which are approximately 10,000 years in age. The Toleston Dunes, which are only 3,000 years in age, delineate Great Marsh's northern perimeter. Great Marsh is the largest interdunal wetland associated with Lake Michigan. Cowles Bog Wetland Complex (CBWC), comprising 197-acres, represents the western terminus of Great Marsh. Vegetation of CBWC was examined and exaltedly written about by many early 20th century scientists including European participants in the 1913 Phytogeographical Excursion. It provided an inspirational focal point for Henry Cowles, one of the fathers of ecology in America. CBWC includes one of only four raised fens in Indiana, the last remaining tamack swamp of four tamack swamps associated with the southern shore of Lake Michigan, and was designated a National Natural Landmark on December 2, 1965.

Starting in the mid-1960's, CBWC exhibited rapid degradation being transformed from a botanical marvel with diverse fauna habitat to a homogenous structure of shrubs and hybrid cattail (Typha spp.). However, vestiges of its floristic uniqueness remains as demonstrated by the presence of 15 state listed species and 41 special floristic elements.

Twenty-six acres of CBWC is parkland owned by the Town of Dune Acres and 171 acres is owned by the National Park Service; Indiana Dunes National Lakeshore. Dune Acres' parkland is east of and adjacent to Indiana Dunes National Lakeshore's parkland and adjacent to Mineral Springs Road. Its location allows for a wetland view-shed for National Park Service visitors and Dune Acres visitors and residents.

In 2008, Indiana Dunes National Lakeshore initiated restoration of the portion of CBWC owned by the National Park Service. In 2009, Dune Acres received a coastal grant to initiate restoration of the portion of CBWC owned by Dune Acres. Dune Acres will reduce hybrid cattail presence by 80 percent, eradicate all common reed and reduce cover and frequency of shrub/tree species except for poison sumac (Rhus vernix), winterberry (Ilex verticillata), and yellow birch (Betula alleghaniensis) by 70 percent. This work will be initiated in early spring of 2010 by Dune Acres' grant partner (The Nature Conservancy).

Work conducted by the National Park Service suggests that the seedbank is species depauperate and dispersal of native seed to CBWC extreamly limited, therefore, in areas void of native wetland plants, plant introduction through seeds and propagules must be conducted in order to reestablish a native plant assemblage. For this reason, Dune Acres is requesting funding for establishment of a native plant assemblage through introduction of the appropriate seeds and plant propagules. This work will be initiated in early spring of 2011.

10. Consistency with and implementation of area planning efforts: Describe how this project addresses a high priority need as identified in **state/regional recognized plans or local planning efforts**. Please attach a copy of the relevant section, reference information and/or website location.

The Lake Michigan Lakewide Management Plan specifically mentions Coastal Shore Systems as an important habitat type associated with Lake Michigan. Recommendations are made to protect and restore these habitats. In this regard special reference is made to "Wetland area, particularly those with connection to the lake that are important to many species" (page ES-9 and 6-4). The Chicago Wilderness Biodiversity Recovery Plan reviewed the state of natural communities in the Chicago Region, determined their status, and established recovery goals. Within the wetland types defined by the "Plan", the subject Dune Acres' Park Lands represent a basin marsh and calcareous floating mat. Both of these wetland types have been placed in the second tier of conservation targets by the "Plan". As stated by the Chicago Wilderness Biodiversity Recovery Plan, the long-term vision and recovery goals for the region's wetland communities is "to preserve all wetland types in viable examples and to expand the amount of some wetland types for wildlife habitat and for the sake of other ecologically important functions." Phase II of The Marquette Plan extends Phase I Marquette Plan from the Port of Indiana to the Michigan/Indiana state line. Protection and enhancement of high quality natural areas and the provision of habitat connectivity are in part the objectives of the Marquette Plan. The Dune Acres' park lands are within the boundaries of the Marquette Plan-Phase II, and Dune Acres has been identified as a potential key stakeholder. Lastly, the Porter County Comprehensive Land Use Plan recognizes the need to "preserve, maintain and enhance environmental resources and features including the dunes, wetlands, woodlands, wildlife habitats, groundwater recharge areas, prime soils, river and stream corridors, and watersheds." (Page 19, Protecting Nature in Your Community, prepared by Northwestern Indiana Regional Planning Commission).

Will this project result in an application to the Regional Development Authority (RDA) or is connected to an

existing RDA application or project? ☐ YES ☒ NO

11. Watershed Location: Hydrologic Unit Code (HUC)

Select 8 or 11-Digit HUC: 04040001 Lake Michigan

Insert 14-Digit HUC here:04040001080020

12. Preliminary Project Budget
Provide an estimated breakdown of the proposed project budget using the following table.

Category	LMCP Request	Match: Cash	Match: In-Kind	Total
Personnel				$0.00
Fringe				$0.00
Travel				$0.00
Supplies				$0.00
Contractual	$14,900.00	$10,963.00	$4,000.00	$29,863.00
Construction				$0.00
Equipment (>$5,000)				$0.00
Signage				$0.00
Other				$0.00
				$0.00
				$0.00
				$0.00
Totals	**$14,900.00**	**$10,963.00**	**$4,000.00**	**~~$59,726.00~~** 29,863

13. Budget Description

a. Describe the use of FEDERAL FUNDS REQUESTED.
Federal funds will be used to purchase the appropriate native plant materials and to install the plant materials

b. Describe the commitment/source of NONFEDERAL matching funds.
Shirley Heinze Land Trust - $8,000 cash donation; Dune Acres Civic Improvement Foundation - $2,963 cash donation; The Nature Conservancy $4,000.00 in-kind services.

14. Project Location Map: Attach to the application a topographic or GIS based map and/or aerial photos clearly showing the proposed project location or area if applicable to your project

15. Acceptance of the terms of the Grant Guidance

"I have read and accept the terms of the Lake Michigan Coastal Grants Program 2010 Funding Cycle Pre Proposal Guidance document."

Signature _____ Date _____

New Applicant to LMCP Grant Program?: ☐ Yes ☒ No