

Appendix C

Ina Marina Market & Initial Feasibility Study

Rend Lake

Market and Initial Feasibility Study

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Prepared For:



Jefferson County, Illinois

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Forward & Executive Summary

Lunde Williams, LLC was contracted to perform a market study and initial feasibility review of a proposed marina facility on Rend Lake by Jefferson County, IL. The proposed site is near Ina, IL, adjacent to Rend Lake, and is currently owned by the US Army Corps of Engineers.

The primary purpose of this study is to determine the appropriate size and scope of a new marina and associated upland development to meet regional demand while preserving the business and financial capacity of the existing Rend Lake Marina, which is located south of Ina in Franklin County, IL. At a minimum, the study will satisfy the requirements set forth in Appendix C – Market Studies, of the U.S. Army Corps of Engineers “Recreation Operations and Maintenance Policies” (ER 1130-2-550). In addition, a Feasibility Study for the proposed project demonstration the financial viability of the project is required based on Appendix D of the same guide.

The project site is included in the Rend Lake Master Plan and mentioned most recently in “Rend Lake, Big Muddy River, Illinois, Supplement No. 1, Design Memorandum No. 6B, Master Plan” dated 22 January 2014 (Ref. 1).

Regional marinas were surveyed to identify their demographics, economic health, and range of offered services. Telephone surveys were used as the primary means of documenting the conditions. Google Earth and Bing Maps were used to provide aerial photography.

The results of these surveys include data regarding current boating demographics and expectations from the boating public are incorporated herein to document the demand and feasibility of a marina at the Rend Lake site.

Background

The proposed project site is located near the north end of Rend Lake, a USACE developed water body originally constructed to provide water storage for the area’s agricultural concerns. The lake excavation was completed in the late 1960’s and filling was completed in the early 1970’s. In addition to water retention, flood control measures, and increased recreational opportunities arose as benefits of the construction.

Nearby, the village of Ina, Illinois is approximately 600 residents and includes the Big Muddy Correctional Center with approximately 1,150 inmates. The village is relatively quiet and is located adjacent to interstate 57 (I-57). The I-57 corridor is a major north-south route originating in Chicago. Interstate 64 intersects I-57 near Mount Vernon and provides a major east-west connection to St. Louis and Evansville. Just south of Ina is Rend Lake College, providing Community College resources to the region.

Originally, a marina was to be built on the Ina site and preparations for a facility included an excavated basin and breakwater and a launch ramp with parking. Little has been done to develop the site since the original construction, but there is adequate open land to develop a variety of facilities. To date, no qualified developers have come forward to develop the site.

Most recently in a supplement to the Rend Lake Master Plan (ref. 1) the marina site is mentioned:

“Ina Resort. Marina Expansion:

The proposed action includes future development of the Ina recreation area as a potential resort and marina complex. Currently there is a harbor area with a boat ramp and courtesy dock that is protected by breakwaters. This area could potentially be used for a marina. The adjacent lands around the harbor area offer potential building sites for a resort and structures associated with it. Any future expansion and the associated costs

will be the responsibility of the developer and/ or future concessionaire, not the USACE and would require completion of a market study."

In 1975, the Ina site development plan included a 100 slip marina facility, with 20 of the slips covered, 12 room lodge with manager's quarters, 20 duplex cabins, gas station, 6,000 sf storage and repair facility, 800 sf bait shop, comfort station, and boat rental facility. The original plan was developed by the Casey Forks Parks District (now defunct) The project site included the property on both sides of county road 43. None of the proposed development occurred and since that time an electrical power line right of way has been installed diagonally across the eastern site, rendering the site east of the county road unusable for the 1975 development plan.

In the Request for Proposal issued for this project, a revised site layout was provided which uses the area north of the basin for additional development while eliminating the east site as a development zone.

The Rend Lake Conservancy District manages water distribution from the lake and leases a portion of the property for their facilities. adjacent to Rend Lake and works with the US Army Corps of Engineers (USACE) owns all of the property surrounding the lake and is responsible for maintaining the lake. The Illinois Department of Natural Resources leases property from the USACE and operates the Rend Lake Resort, a multi-use facility along the lakes eastern edge.

Study Approach

This study is designed to meet the requirements of the USACE Real Estate Manual and to provide insight into the potential market for a marina at the Ina location originally documented in the Rend Lake Master Plan. Wherever possible, this report will document the resources of the information used in this study.

ESRI (the Environmental Systems Research Institute) was used as a resource for demographic information for this survey. Their work is coordinated with US Census data and predictions. Detailed documentation of the results may be found in Volume 2 of this report.

ER 1130-2-550, Appendix C defines the requirements for a Market Study. An inventory of existing marinas within a 30 mile radius is to be developed as a resource. Due to the unique constraints of the region, an increased radius of 60 miles is to be used for this study. Appendix C also requires a demand study to be developed to demonstrate a demand for a marina facility. The demand study will contain data on the regional population, future projections regarding this population. For the demand study, the National Marine Manufacturers' Association (NMMA) and the Association of Marina Industries (AMI) were contacted for trends and expectations data and the results are contained herein.

ER 1130-2-550 Appendix D defines the need and goals for a Feasibility Study as demonstrating that the project may return a reasonable return of profit on a yearly basis. The study is based on several assumptions that will be refined and adjusted as the design process moves forward. As with any public or semipublic project, the decision of which costs to be amortized and which costs to be absorbed as part of the initial investment will influence the ultimate profitability of the project.

Section One - Marina Survey Data

Understanding the potential market for a marina near the north end of Rend Lake begins with documentation of the existing facilities within the region. A survey of the known marina facilities within a 30 and 60 mile radius of Ina, IL was developed using Google, Google Maps, and Quimby's Cruising guides as resources. Websites for the identified marinas were used as initial data collection followed by telephone interviews.

A very limited number of marinas are within the project specified distances. Marinas at Lake Shelbyville, Springfield Lake and the Mississippi River were well beyond the distance limits for this study and were therefore not included.

30 mile limit subject marinas

Rend Lake Resort Marina

Rend Lake Marina

Blue Heron Marina (Crab Orchard Lake)

60 mile limit subject marinas

West Access Marina (Carlyle Lake)

Tradewinds Marina (Carlyle Lake)

Boulder Marina (Carlyle Lake)

Kaskaskia River Marina (Kaskaskia River)

Kinkaid Marina (Lake Kinkaid)

Crab Orchard Lake NWR (Crab Orchard Lake)

Mack's Lake of Egypt Marina (Lake of Egypt)

Egyptian Hills Marina (Lake of Egypt)

Golconda Marina (Ohio River)

Calls were placed to management staff at all of these marinas and their feedback was combined with input from appropriate websites. The results are tabulated in the following tables. Where results are left blank, the information available was insufficient to reach a definite conclusion.

Existing Regional Marinas

Rend Lake Marina

8955 West Dam Lane
Benton, IL 62812
(618) 724-7651

274 slips; 70 covered, 204 uncovered

Upland indoor and outdoor storage

Repair Shop

Boat Sales

Slip Rates

Houseboat	\$36/Ft. (\$1450 Min)
Covered Single	\$1175
Covered Double	\$1050
Uncovered	\$795

The only real competition on Rend Lake, RLM is a full service marina with storage and service available. Currently the marina stands at 70-75% occupancy with a loyal clientele of over 50% returning customers. No food service is available onsite, although the current owner has a liquor license for beer and wine. Pontoon boat and Jon boat rentals are available. The marina is currently for sale; the owner is retiring.



Rend Lake Marina

8955 W. Dam Lake Lane
Benton, IL 61812
(618) 724-7651
[www.rendlakemarina.com](#)

Water Body

Rend Lake

Distance to Ina

8.5

Wet Slips	20	25	30	35	40	45	Total
Covered							70
Uncovered							204

Rates	20	25	30	35	40	45
Covered			\$ 1,085	\$ 1,220		\$ 1,450
Uncovered			\$ 850			

Storage	Qty.	
Indoor	X	up to 30'
Outdoor	X	\$45/Mo

Service	X	
Dining		No onsite dining, but beer and wine license

Nearby Amenities

Food

Service

Storage

Lodging

Pontoon

Ski

Sail

Kayak

Fishing

Notes:

Houseboats \$36/FT ; \$1450/ Min

\$1085 Double Slip; \$1220 Single Slip

Fuel Dock & Pumpout

New and Used Boat Sales

Storage on site indoor and outdoor

Rend Lake Resort Marina

11712 E Windy Ln
Whittington, IL 62897
(618) 329-2211

94 slips

No storage or service

Lodging on site

Restaurant on site

The marina associated with the resort is not a traditional marina, but more of a transient marina catering primarily to boaters visiting the Resort. It is owned by USACE, leased to the State of Illinois and subleased to a concessionaire. No seasonal slips are leased and the marina is managed only as an adjunct to the resort. Day rentals of pontoon boats are available. Occupancy varies dramatically based on the number of resort visitors. Rarely is it more than 50% occupied.



Rend Lake Resort Marina	Water Body		Rend Lake			
11712 E Windy Ln				Distance to Ina	4	
Whittington, IL 62897						
(618) 329-2211						
http://www.rendlakeresort.com/						
Wet Slips	20	25	30	35	40	Total
Covered						
Uncovered	94					94
Rates	20	25	30	35	40	
Covered						
Uncovered						
Storage	Qty.					
Indoor						
Outdoor						
Service						
Dining						
Nearby Amenities				Rentals		
Food	X			Pontoon	X	
Service				Ski		
Storage				Sail		
Lodging	X			Kayak		
				Fishing		
Notes:						
	Not a traditional marina facility, more of transient docks for their resort guest.					
	Includes fuel dock					
	Rates not published					

Blue Heron Marina and Campground (Crab Orchard Lake)

3697 Old State Route 13,
Carterville, IL 62921
(618) 985-2572

137 slips

Marina primarily tied in to campground facility.

No indoor storage some outdoor storage

Adjacent food service

Seasonal slips are available for \$725/ season, mostly fishing and pontoon boats. This marina is usually well occupied and its low fees allow for campers to keep boats at the docks for the season. The lake is relatively shallow and has little in the way of sailboats.



Blue Heron Marina & Campground		Water Body		Crab Orchard Lake		
3967 Old State Route 13				Distance to Ina	37	
Carterville, IL						
618 985-2572						
https://www.visitcarterville.com/visit/recreation/marina						
Wet Slips		20	25	30	35	40
Covered						
Uncovered				137		
Rates		20	25	30	35	40
Covered						
Uncovered				\$ 725.00		
Storage		Qty.				
Indoor						
Outdoor						
Service						
Dining						
Nearby Amenities				Rentals		
Food				Pontoon	X	
Service				Ski		
Storage				Sail		
Lodging				Kayak	X	
				Fishing	X	
Notes:						
		Marina caters to campground crowd				
		Alcohol free site				

West Access Marina (Lake Carlyle)

14222 Lake Road
Carlyle, IL 62231
(618) 594-2461

250 slips, uncovered 20- 40 foot

Outdoor storage

Service on site

Split between sail and powerboats, well known sailor's lake

Pontoon and kayak rentals available

Nearby restaurant "The Fish House" provides food access

This marina is known as "the nicest on Lake Carlyle" is a destination marina for the region with a variety of amusements and a good lake location. Relatively full, this marina provides a full range of services to the boaters and the adjacent restaurant has a symbiotic relationship with the marina.



West Access Marina	Water Body		Carlyle Lake				
14222 Lake Road				Distance to Ina	56		
Carlyle, IL 62331							
(618) 594-2461							
www.westaccess.com							
Wet Slips	20	25	30	35	40	50+	Total
Covered							
Uncovered					250		
Rates	20	25	30	35	40	50+	
Covered							
Uncovered							
Storage	Qty.						
Indoor							
Outdoor							
Service							
Dining							
Nearby Amenities				Rentals			
Food	*			Pontoon	x		
Service	x			Ski			
Storage	x			Sail			
Lodging				Kayak	x		
				Fishing			
Notes:	Office Manager, Shannon						
	250 slips		Cooperates with nearby "The Fish House" for food				
	Max about 40'		Nicest marina on the lake				
	50 50 power to sail		Not threatened by Rend Lake development				
	No covered slips						
	Fuel and pumpout						

Tradewinds Marina (Lake Carlyle)

10 Tradewinds Drive
Keyesport, IL 62253
(618) 749-5649

146 slips

One of the newest marinas in the region, this facility has concrete decked docks, modern utilities and appears to be very successful.



Tradewinds Marina

Water Body	Carlyle Lake
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Distance to Ina	45
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Keyesport, IL

(618 749-5649

<http://www.tradewindsmarina.net>

Wet Slips	20	25	30	35	40	45	Total
Covered		48	12		4	4	68
Uncovered		48	12	18			78

Rates	20	25	30	35	40	45
Covered	\$ 2,100	\$ 2,700	\$ 3,300		\$ 4,000	\$ 4,900
Uncovered		\$ 2,355	\$2,826	\$ 3,297	\$ 3,768	\$ 4,239

Storage	Qty.
Indoor	0
Outdoor	100

Service	Some
Dining	No

Nearby Amenities

Food	
Service	
Storage	X
Lodging	

Notes:

Minor Boat rentals
Built in 2004

Rentals

Pontoon	No
Ski	
Sail	
Kayak	
Fishing	

Boulder Marina (Lake Carlyle)

26000 Access Road
Shattuc, IL 62231
(618) 226-3223

274 slips

The marina management offered limited insight on the facility when contacted. The marina is adjacent to a large launch ramp facility. Rates were taken from the facility's website.



Boulder Marina

Water Body

Lake Carlyle

Distance
to Ina

42

26000 CTY Rd

Shattuc, IL

(618) 226-3223

<http://www.bouldermarina.com>

Wet Slips	20	25	30	35	40	50	50+	Total
Covered								
Uncovered		54	168	52				274

Rates	20	25	30	35	40	50	50+
Covered							
Uncovered		\$ 1,875	\$ 2,250	\$ 2,625	\$ 3,000		

Storage	Qty.
Indoor	
Outdoor	X

Service	X
Dining	

Nearby Amenities	None
Food	
Service	
Storage	
Lodging	

Rentals	No
Pontoon	
Ski	
Sail	
Kayak	
Fishing	

Notes:

Marina operator did not wish to discuss

Kaskaskia River Marina (Kaskaskia River)

1 Harbor Point Drive
New Athens, IL 62264
(618) 475-2223

48 slips, (approximate).

Marina did not respond.



Kaskaskia Marina

Water Body

Kaskaskia River

Distance
to Ina

55

1 Harbor Point

New Athens, IL 62264

(618) 475-2223

<http://www.kaskaskiariverhouse.com>

Wet Slips	20	25	30	35	40	45	Total
Covered			8	8	8		24
Uncovered	24						24

Rates	20	25	30	35	40	45
Covered						
Uncovered						

Storage	Qty.
Indoor	
Outdoor	

Service	
Dining	

Nearby Amenities

Food	
Service	
Storage	
Lodging	

Notes:

Rentals

Pontoon	
Ski	
Sail	
Kayak	
Fishing	

Kinkaid Marina (Lake Kinkaid)

2063 Marina Road
Murphysboro, IL 62966
(618)687-5624

270 slips

Marina primarily tied in to campground facility.

No indoor storage some outdoor storage

Adjacent food service

Popular facility with slip leases at or near capacity. Seasonal slips are available for \$750/ season, mostly fishing and pontoon boats.



Kinkaid Marina	Water Body		Lake Kinkaid			
2063 Marina Road					Distance to Ina	51
Murpheyboro, IL 62966						
(618) 687-5624						
http://www.kinkaidmarina.com						
Wet Slips	20	25	30	35	40	45
Covered			30			
Uncovered			240			
Rates	20	25	30	35	40	45
Covered						
Uncovered						
Storage	Qty.					
Indoor						
Outdoor						
Service						
Dining						
Nearby Amenities				Rentals		
Food				Pontoon	X	
Service	X			Ski		
Storage	X			Sail		
Lodging	X			Kayak		
				Fishing	X	
Notes:	Associated with campground					
	has launch ramp					

Crab Orchard NWR (Crab Orchard Lake)

899 Playport
Carbondale, IL 62901
(618) 997-3344

134 slips all uncovered

60 houseboat slips at \$30/ft.

50 pontoon and fishing boat slips at \$675-715/ year

Run by the US Fish and Wildlife Service, this marina (formerly called Playport Marina) has houseboats, sailboats, and fishing boats within the boundaries of the Crab Orchard National Wildlife Refuge. Water and power are available only on the larger slips. No other amenities are on site other than primitive restroom facilities. This facility is not run as a private or profit making venture. Houseboat slips are well occupied with adjacent boaters forming long term communities.

No food service available

No lodging available

No boat service available.



Crab Orchard National Wildlife Refuge	Water Body		Crab Orchard Lake				
899 Playport, Carbondale, IL (618) 997-3344 Web Page				Distance to Ina	40		
Wet Slips	20	25	30	35	40	50+	Total
Covered							
Uncovered		74			30	30	134
Rates	20	25	30	35	40	50+	
Covered							
Uncovered		\$ 715			\$ 1,200	\$ 2,100	
Storage	Qty.						
Indoor							
Outdoor	50						
Service							
Dining							
Nearby Amenities				Rentals			
Food				Pontoon			
Service				Ski			
Storage	X			Sail			
Lodging				Kayak			
				Fishing			
Notes:							
	Operated by USFWS, not a profit making venture.						
	Limited utilities, fuel and pumpout available						
	No Rentals. Mostly fishing and houseboats						

Mack's Lake Marina (Lake of Egypt)

12024 Laguna Drive
Marion, IL 62959
(618) 964-1824

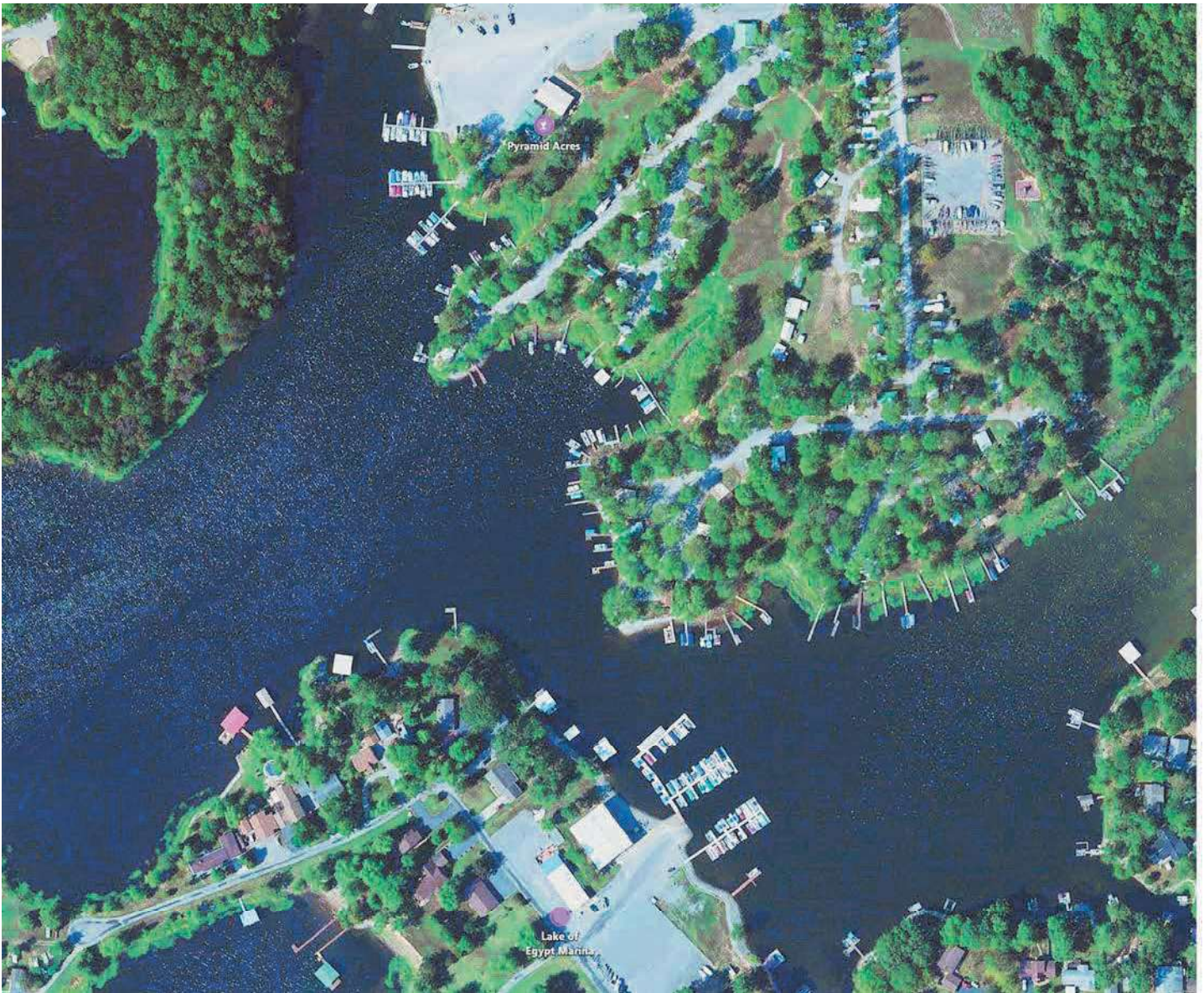
137 slips Small boats only less than 20' powerboats; less than 28' pontoon boats

Marina primarily tied in to campground facility.

No indoor storage some outdoor storage

Adjacent food service

Seasonal slips are available for \$750/ season, mostly fishing and pontoon boats.



Mack's Lake of Egypt	Water Body		Lake of Egypt			
12024 Laguna Drive			Distance to Ina	43		
Marion, IL 62959						
618 964-1824						
www.macksmarina.com						
Wet Slips	20	25	30	35	40	Total
Covered						
Uncovered						137
Rates	20	25	30	35	40	
Covered						
Uncovered						
Storage	Qty.					
Indoor	X					
Outdoor	X					
Service						
Dining						
Nearby Amenities				Rentals		
Food	X			Pontoon	X	
Service	X			Ski		
Storage	X			Sail		
Lodging				Kayak		
				Fishing		
Notes: Small boats only less than 20' power, 28' pontoon						

Egyptian Hills Marina (Lake of Egypt)

75 Egyptian Parkway

Creal, IL 62922

(618) 996-3449

132 slips

Older facility and not occupied to capacity.



The Resort at Egyptian Hills

75 Egyptian Pkwy
 Creal Springs, IL 62622
 (618) 996-3449
www.egyptianhillsresort.com

Water Body	Lake of Egypt	
	Distance to Ina	42

Wet Slips	20	25	30	35	40	45	Total
Covered		12					12
Uncovered	80	20	20				120

Rates	20	25	30	35	40	45
Covered						
Uncovered						

Storage	Qty.
Indoor	
Outdoor	X

Service	
Dining	

Nearby Amenities

Food	X
Service	X
Storage	X
Lodging	

Notes:

Not accurate count on slips

Rentals

Pontoon	x
Ski	
Sail	
Kayak	
Fishing	

Golconda Marina (Ohio River)

One Marina Way
Golconda, IL 62938
(618) 683-5875

200 slips, mostly covered 20'- 60' foot

A State owned and concessionaire operated facility, Golconda has a long reputation as a destination marina on the Ohio River. A new concessionaire took over management this year with little experience.

No outdoor storage, but some boats stay in slips year round



Golconda Marina		Water Body	Ohio River			
One Marina Way				Distance to Ina	77	
Golconda, IL 62938						
(618) 683-5875						
www.golcondamarina.com						
Wet Slips		20	25	30	35	40
Covered						200
Uncovered						30
Rates		20	25	30	35	40
Covered			\$ 1,315	\$ 1,745	\$ 2,315	\$ 2,395
Uncovered		\$ 695	\$ 885			\$ 3,575
Storage		Qty.				
Indoor						
Outdoor						
Service						
Dining						
Nearby Amenities				Rentals		
Food		No		Pontoon	X	
Service		No		Ski		
Storage		No		Sail		
Lodging		No		Kayak		
				Fishing	X	
Notes:						
		State owned, concessionaire run facility				
		Operators seem unfamiliar with operation				
		Low occupancy (25%?)				

Survey Summary Results

The marina facilities within 30 miles of the proposed site are limited to one full service (Rend Lake) marina and a docking facility reserved for guests of the Rend Lake Resort. Marinas in the 60 mile radius vary in quality and services, some being full service and others merely boat mooring slips.

Common trends at these marinas include:

1. Houseboats and pontoon boats predominate. Houseboats tend to range from 40' to 60' plus. Large but not as large as those found in the Land between the Lakes, a mere 120 miles south of Rend Lake. Pontoon boats are used for relaxed boating, fishing and as waterborne patios.
2. Sailboats on Rend Lake are nearly non-existent. The bridge across the center of the lake effectively bisects the lake and does not allow taller vessels to traverse from north to south. Sailing is much more common on Carlyle Lake and Lake Shelbyville.
3. Fishing boats exist on the lake. The abundance of launch ramps means many of these are trailered to the lake. Some of them would be candidates for drystack storage.
4. Rend Lake Marina is the most complete facility in the region. It provides slips, storage, service, and boat rentals.
5. Few of the marinas in this region are full. Those that are tend to be the newest and nicest. Reasons may include the relatively depressed regional economy, the lack of marketing in downstate Illinois, and the lack of newness of the existing facilities.
6. Occupancy varies from marina to marina quite dramatically; those that offer more services tend to do better, while some like Blue Heron tend to have a specialized clientele centered on the camping experience.
7. Many of the surveyed marina facilities have no or limited ancillary businesses nearby.
8. Campgrounds are often tied into these facilities, providing an additional revenue source and offering inexpensive on site lodging for boating families. The nearest camping facilities to the Ina site are the South Marcum Campground, Wayne Fitzgerald State Recreation Area, and Gun Creek Campground. These are primarily RV camping based facilities.

Regional Demographics

The nearest city to the Ina site is Mount Vernon, with a population of 15,000 plus. It is the primary economic engine for Jefferson County and provides manufacturing, health care, and service employment. The Village of Ina, Illinois is a small community with only 600 residents. Ina is located on the east side of the Interstate I-57 that passes North-South adjacent to the project site. A state prison with 1,100 plus inmates is south of Ina. The prison and Rend Lake College are the primary employers in the immediate area.

Demographic information of the 30 mile, 60 mile, and 100 mile radius are documented in and summarized below. Although the 100 mile demographic information is not required by the USACE market study, it is included here to provide a different perspective than the base region and to include a major metropolitan area (St. Louis). Unless noted otherwise, statistics are based on 2015 data. The region is populated with owner occupied homes that are modest and tend to be built prior to 1970.

30 Mile Radius

Within 30 miles of the project site, the population is 204,309 with racial breakdowns of 90.6% White, 5.1% Black, 2.7% Hispanic, with the remainder being scattered ethnicities. The population is relatively static with expected growth of .07% over the next five years. It is expected to trail national population growth significantly.

Median household income is \$39,418 and average household income is \$52,772. Income is expected to grow at an annual rate of 2.41%, slightly lower than the state rate of 2.8% and the national rate of 2.66%.

Median age is 41.6

Boat demographics in this region are primarily small fishing vessels, pontoon boats and small to mid-size houseboats. Boats generally used on the small lakes, either natural or Corps owned and primary uses include: fishing, skiing, and general pontoon type touring. Rend Lake is the primary water body within the 30 mile radius. Crab Orchard Lake is also in the 30 mile radius, but the demographics belong in the next paragraph.

60 Mile Radius

Within 60 miles of the project site, the population is 603,736 with a racial breakdown of 90.7% White, 5.3% Black, and 2.2% Hispanic, with the remainder being scattered ethnicities. The population is extremely static with a projected growth of only 0.01% over the next five years. This region will trail national growth significantly.

Median household income is \$43,481 and average household income is \$56,976. Income is expected to grow at an annual rate of 2.82%, equal to the state rate and slightly ahead of the national rate of 2.66%

Median age is 40.5

Boat demographics in this region are primarily small fishing vessels, pontoon boats and small to mid-size houseboats. Lakes in this zone include Carlyle Lake, Crab Orchard Lake, Lake of Egypt, and Lake Kinkaid. Portions of the Mississippi and Ohio Rivers are included within this radius, but other than Golconda Kaskaskia Marinas are not known to have marinas within this zone. Boats generally used on the small lakes, either natural or Corps owned and primary uses include: fishing, skiing, and general pontoon type touring. Sailboats may be found on Carlyle Lake.

100 Mile Radius

The 100 mile radius includes part of the St. Louis metropolitan area and is a significantly different demographic than the 30 and 60 mile rings. Within this radius are 4,004,365 people with a racial background of 79.9% White, 15.0% Black, 2.7% Hispanic, and 1.9% Asian, with the remainder being scattered ethnicities. The population is relatively static with only 0.10% expected growth in the next five years. This trails both state and national expectations significantly.

Median household income is \$43,275 and average household income is \$65,931. Income is expected to grow at an annual rate of 2.54%; less than the state and the national rates.

Median age is 39.8, slightly younger than the 30 mile and 60 mile median ages.

The 30 mile demographics are more homogeneous than the 100 mile demographic and represent a tighter economic stratum than the larger group.

Within the 100 mile radius are marinas associated with river boat recreation. Primary boats on the major rivers add cruisers, larger houseboats, and higher horsepower fishing and skiing boats to those in the smaller zones. Rates at Riverine marinas in the St. Louis area tend to be significantly higher than in the 30 mile radius.

Traffic Flow and Accessibility

North-South and East-West access to the Ina site is excellent, being provided by I-57 and I-64 respectively. Average daily traffic counts on the interstates are 37,700. These roads provide easy access from almost all of southern Illinois. The entrance-exit to I-57 is within a quarter mile of the proposed facility and would provide excellent access to North-South and East-West travelers.

Demand

Demand for boating facilities may be more difficult to gauge in the heartland of southern Illinois than in areas such as the Mississippi River Valley and the Great Lakes. In those regions, mature, developed boating cultures support the marinas and ancillary businesses in a robust fashion. Where multiple marinas exist, competition enhances the culture and the excitement. Having multiple marinas in a region is similar to having an urban restaurant district. Where multiple alternatives exist, the quality of the restaurants improves and the customer's opportunity to find just what they want also improves.

At Rend Lake, the primary access to the lake is the Rend Lake Marina, a few slips at Wayne Fitzgerald State Park, and multiple launch ramp facilities. Rend Lake Marina is located at the far southwest corner of the lake and is as far away from the Ina site as possible. Of a secondary nature is the docking facility at the Rend Lake Resort. The original master plan called for up to four marina facilities on the lake. Since only the Rend Lake marina is a fully functioning marina, it is safe to state the potential remains unrealized.

Demand for quality facilities exists at a nominal level in this region, but the possibility of expanding the market to increase demand also exists. Any successful development plan for this site must integrate multiple revenue streams to become a sustainable venture.

According to the National Marine Manufacturers Association, in 2014 there were 23,871 boats in congressional district 12 (Rend Lake's regional district) and Illinois new boat sales and accessory exceeded \$334.9 Million dollars.

Discussions with industry trade associations, most notably the Association of Marina Industries (AMI), note increasing pressure for new and better facilities. Wendy Larimer of AMI noted that in 2016 marinas throughout the Midwest are averaging over 75% occupancy for the first time in a decade. Industry surveys from 2012-2015 were reviewed in the generation of this report and their results show an increase in occupancy, demand, revenues, and profit each year for the last four years.

The population within the 30 mile limit has few choices for boating and waterfront recreation. The Rend Lake Marina is far more remote and difficult to access. The marina at the State facility is not prepared to accept non resort boaters.

A waterfront development near the Interstate will have a built in advantage and have a much larger population base to draw customers from.

Interviews with Jefferson County residents have identified a desire for a marina facility nearer to Mount Vernon. The Jefferson County Development Corporation also identified the Ina location as an ideal spot for economic development.

Seasonality

The boating season essentially begins April 1st and is in full swing by Memorial Day. The season begins to contract by Labor Day weekend and mostly ends by the end of October. Dry boat storage is generally divided into year round storage and winter only storage. Rack storage is an alternate that has not been widely used within the 30 mile radius, but should be explored as an additional revenue center.

Lodging may be considered an annual revenue producer. It would be in direct competition with the Rend Lake Resort and with existing facilities in nearby Mount Vernon. The use of lodging facilities on a major interstate would provide a year round income that was not solely dependent on boating and the boating season.

RV campsites also extend the season beyond the Memorial Day to Labor Day limits. Snowbird users may find this location ideal for stopping on their travels.

Ideally, some portion of the facility needs to operate year round to provide staff continuity. Boat sales can help stabilize the work force, but are a higher capital investment venture. Consideration of a boat sale facility should left up to the selected developer.

Working with the Corps

The property being considered for use is owned by the U.S. Army Corps of Engineers (Corps) and therefore falls under the control of their policies for development. Their policies are documented in Regulation 1130-2-550 RECREATION OPERATIONS AND MAINTENANCE POLICIES. Chapter 16 of the Regulation, Recreation Development Policy for Outgranted Corps Lands, specifically identifies the requirements and restrictions to developments on their property. Within this policy there seems to be significant restrictions on stand-alone developments.

"16-3. Policy

a. The primary rationale for any future recreation development must be dependent on the project's natural or other resources. This dependency is typically reflected in facilities that accommodate or support water-based activities, overnight use, and day use such as marinas, campgrounds, picnic areas, trails, swimming beaches, boat launching ramps, and comprehensive resort facilities. Examples that do not rely on the project's natural or other resources include theme parks or ride-type attractions, sports or concert stadiums, and stand-alone facilities such as restaurants, bars, motels, hotels, non-transient trailers, and golf courses. Normally, the recreation facilities that are dependent on the project's natural or other resources and accommodate or support water-based activities, overnight use, and day are approved first as primary facilities followed by those facilities that support them. Any support facilities (e.g., playgrounds, multi-purpose sports fields, overnight facilities, restaurants, camp stores, bait shops, comfort stations, boat repair facilities) must also enhance the recreation experience, be dependent on the resource-based facilities, be secondary to the original intent of the recreation development and the land base occupied by the outgrant. The Corps will not support private exclusive use of any type of facility.

b. Corps policy is to provide outdoor recreation opportunities to the public where there is an unfulfilled demand and a corresponding deficit of those facilities. This shortfall is fulfilled by either the Corps constructing the facilities itself or allowing Federally recognized Indian Tribes, other public (Federal, state and local), private sector, quasi-private entities or individuals to do so on project lands through an outgrant. Accordingly, outgrants that the Corps enters into should not unfairly compete with other established private or public recreational facilities. Existing outgrants with proposed facilities in development plans should be given priority to develop similar facilities within a reasonable timeframe before issuing a new outgrant for like facilities."

The development plan shown in this report is designed to comply with the policies and guidance identified in the handbook.

One opportunity to develop this site was presented in a teleconference with the USACE representatives. The site could be leased to Jefferson County under a no fee arrangement and then subleased to a qualified developer. This would free USACE from managing the development process and allow Jefferson County to have more control of the development itself. Plans for the development would have to still be approved by USACE and sublease fees would be used to provide maintenance and further development of the site.

Development Plan

In 1975, the plan for development utilized the standards current at the time. A small 100 slip facility was illustrated with parking, a bait shop and a small boat storage facility. No development ensued however and plans for the site stopped after a breakwater and launch ramp facility were completed. Over the next 40 years, changes in marina development philosophy dramatically altered the way marinas are developed.

The Request for Proposal of these studies included a 239 slip marina facility with several supporting businesses located nearby. A development plan for this study will need to have complimentary revenue streams that support the interrelated businesses; it must be assumed for this study that one owner/operator controls the entire complex. Separate owners would not be able to provide financial support for the other businesses.

Dimensions were developed by overlaying a photograph taken from Google Earth and using AutoCAD tools to begin a development plan. The combined parcels have an upland area of approximately 63 acres. Much of the north section is at or below flood plain level, which significantly impacts construction options.

For this study, the development plan presupposed a single developer/ owner with a coherent understanding of the potential revenue sources. Primary revenue opportunities include:

1. Seasonal slip leases
2. Transient slip leases
3. Winter storage
4. Drystack storage
5. Service (type to be determined)
6. Fuel and sanitary pumpout services
7. Lodging (type to be determined)
8. Convenience store
9. Camping sites
10. Boat rentals
11. Boat sales

Separate businesses that are not controlled by the marina developer cannot be included in the feasibility assessment since revenues and costs for the unassociated businesses would be irrelevant to the evaluation. A gas station that primarily supplies the Interstate traffic is an example of such a business. Property adjacent to the interstate not owned by the USACE would be a candidate for that development.

A lodge type of rental development is included in this study providing a separate revenue stream and is considered part of the overall development plan. The developer should have considerable leeway regarding the type and size of the lodging structures however (possibly including cabins).

The marina docks should be sized to provide a range of slips appropriate to the projected boat demographics. The majority of the marina docks should be covered; 10-25% of the slips may be uncovered to provide lower cost alternative slips. Slip leases provide most of the annual revenue at most inland marina facilities. Occupancy of 75% or higher is generally considered successful.

Drystack storage buildings provide summer and winter boat storage and the convenience of keeping the vessels out of the weather when not in use. Boats 33' long and less provide most of the drystack candidates except at coastal

installations where they may be significantly larger. Payback for the capital investment for these structures is usually fairly short.

Service is generally not a huge profit center in the marina industry although in many regions although it is considered essential to a complete operation. Service centers with larger, more complex boats have larger revenue bases and tend to represent the most profitable facilities. Limited service such as oil changes, winterization routines, propeller replacement can be done with limited indoor facilities and low capital investment.

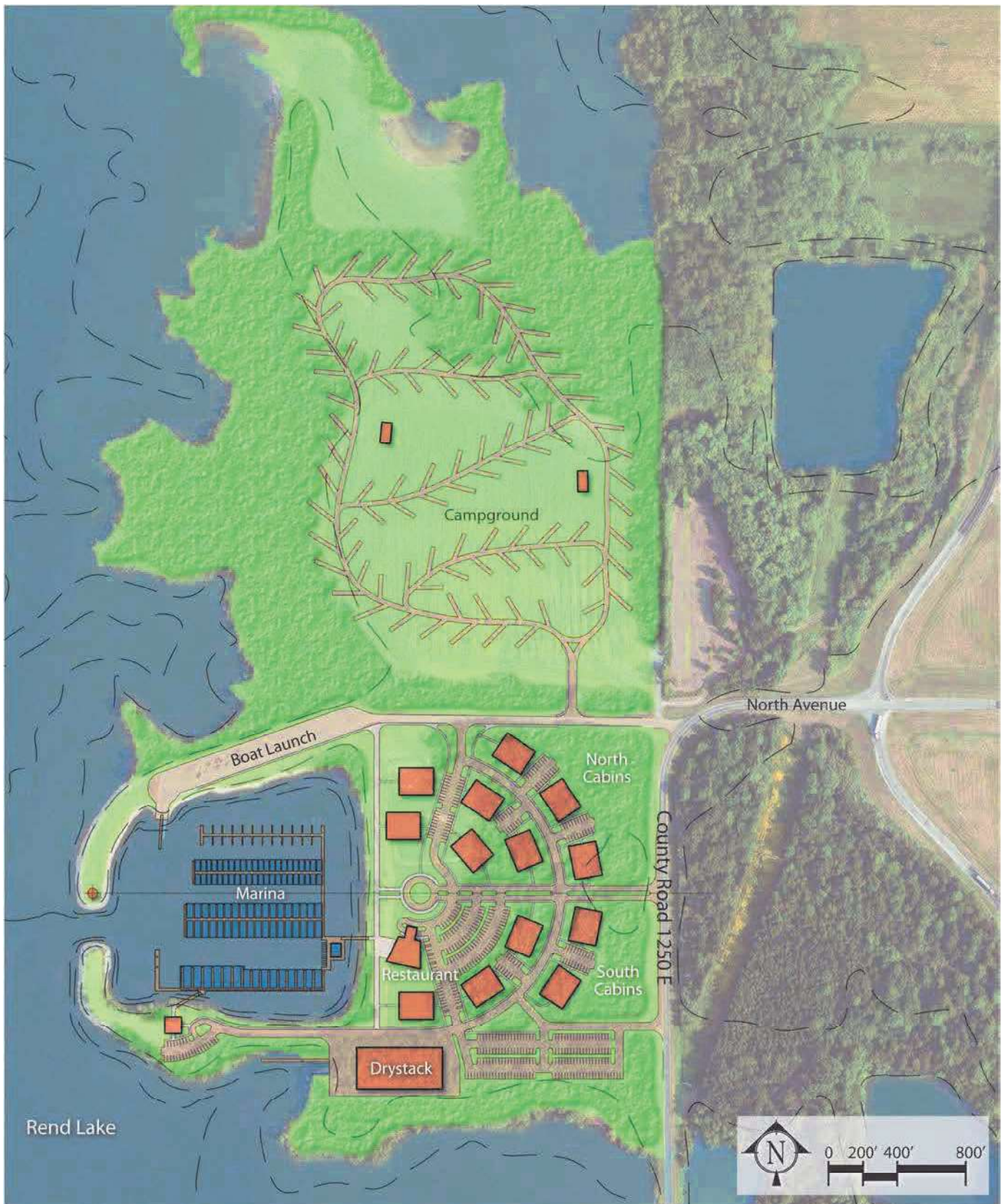
Fuel sales and a convenience store will add revenue sources to the operations mix.

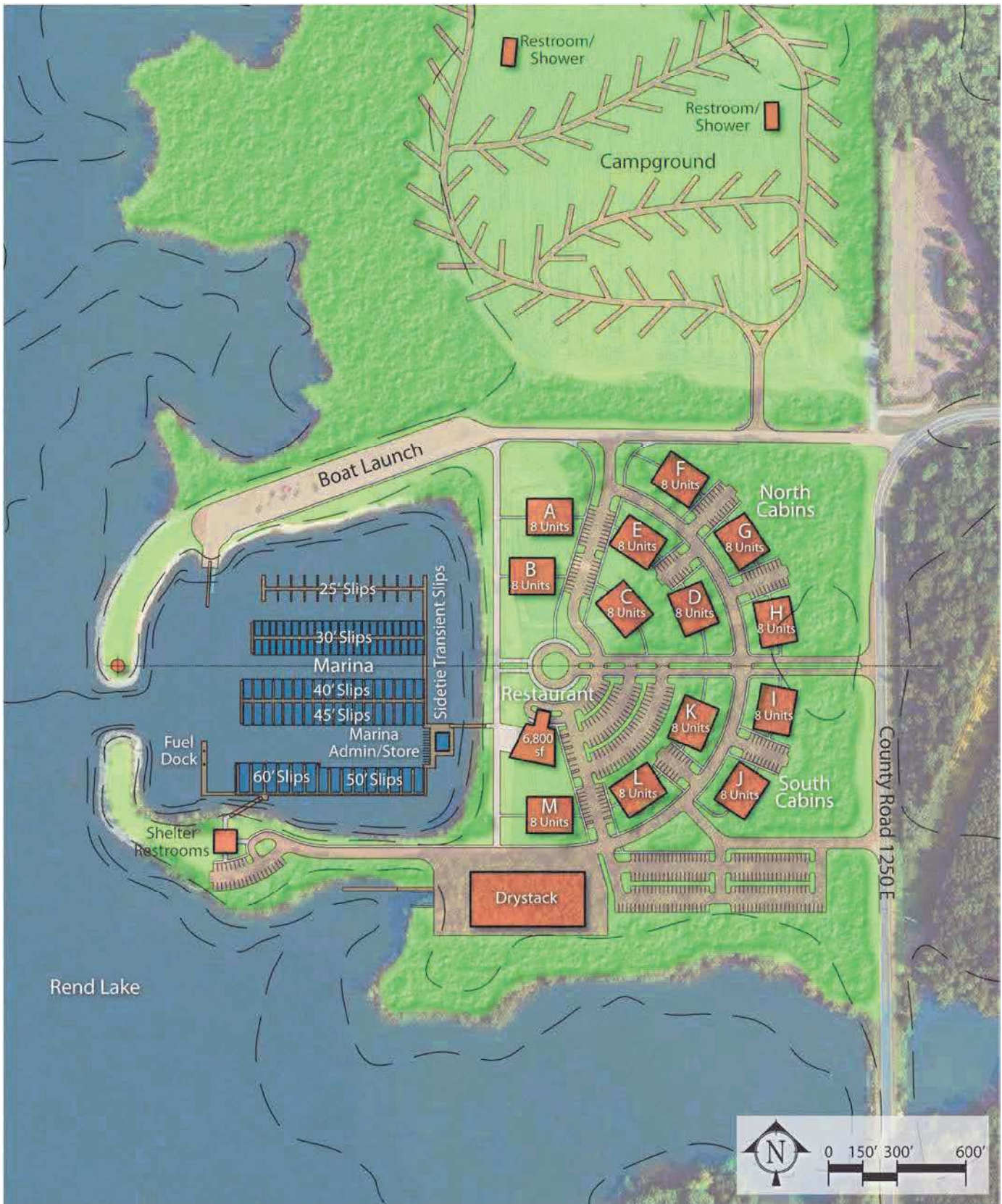
Where marina facilities stand alone, additional recreational opportunities are desirable. The Recreational Camping season is longer than the boating season and is a relatively low cost capital investment.

Boat sales could also add to the revenue streams available at the site. This is a capital intensive venture and the developer should be free to determine whether this is a desired business line. Boat rentals are a common source of revenue at the regional marinas and should be included at this facility.

A development plan generated for this market study includes the aforementioned facilities. It includes:

1. 143 marina slips w/ fuel dock and sanitary pumpout facility
2. 180 boat capacity drystack building
3. 96 site RV campground w/ restrooms and showers
4. 13 Cabins (8 Units) – Total of 104 Units
5. Restaurant – 6,800 sf
6. Marina Convenience Store
7. Marina office with restrooms and showers
8. Parking for marina, restaurant, and cabins
9. Shelter





Section Two- Feasibility

This segment will demonstrate the potential and sustainability of a marina based recreational center at the Ina project site. Expected development costs will be identified, profit center revenues will be predicted, and a preliminary pro-forma analysis is performed.

Rend Lake is one of several significant Corps owned lakes in southern Illinois. At fifteen miles long and nearly three miles wide it provides a variety of boating recreational choices. It is a shallow lake, but well controlled and provides excellent fishing opportunities. The village of Ina location on Interstate 57 and near I-64 provides excellent access to the site from all directions. From a location viewpoint the site is ideal.

The existing basin created was excavated during development of the original lake and provides a protected environment for boat launch and retrieval. The basin is also large enough to provide a wet slip marina as shown on the development plan.

Existing marinas within the 30 mile and 60 mile radius vary in their occupancy, rates, and services rendered. The closest one, Rend Lake Marina, is currently for sale and its performance less than ideal while this is happening. Other marinas in the region are performing well and have good revenues.

The lake itself has more than adequate capacity for the proposed added boats. Using the Indiana factsheet developed in 2002 by the Indiana Clean Lakes program for calculating boating capacity for an inland lake and assigning a 20/acre per boat limit typically used for waterskiing, this 18,900 acre lake has nearly a 945 boat capacity. Increasing the density to 10 acres per boat for all uses brings capacity to 1,890. Removing areas of the lake impractical for boating (shorelines up to 200 feet and areas near the dam reduces the capacity somewhat, but on a lake the size of Rend Lake, not significantly. Currently, with the 368 slips at the two existing marina facilities and the boats that use the ramp facilities there is significant remaining capacity on the lake.

A proposed marina was included in the original master plan at the Ina site and remains in the current version of the plan. The site was partially developed earlier with a breakwater constructed and a launch ramp and trailer parking built. Based on the existing site, a marina here is constructible.

Drystack storage facilities currently are rare in southern Illinois, but they are economically viable and a great means of providing boat storage in a limited footprint allowing for a greater return on investment for the operator. Since the existing marina basin is limited in size, an alternative could be to place the boat access to the drystack outside the main basin.

Lodging, food service, and convenience facilities add to the sense of destination at this site; the size and services will need to be determined by the developer. Lodging is the most capital intensive structure for this study and the approach must tie in to the marina facility to be viable as a Corps property development.

The RV campground dramatically enhances access to the lake facilities, the boat ramp and the marina. Other RV facilities exist along the lake, but the location near the interstate exit is very desirable.

Potential Profit Centers

Profit centers for the Ina facility might include:

- Wet slips seasonal rentals
- Drystack storage facility
- Fuel Sales
- Boat rentals
- Campsites
- Cabin rentals
- Restaurant
- Store sales
- Winter storage
- Boat service

Generated for this report is an example of how this development could proceed. Caution should be exercised with this example and the selected developer may choose other means to achieve economic viability. The final decision regarding the implemented strategies will be determined by the developer.

Per ER 1130-2-550 Appendix D, profit centers may be divided into two types: Primary centers that include facilities that draw visitors to the specific development and secondary centers that support the development, but are not necessarily site dependent.

Primary Revenue Centers- Facilities That Draw People

The primary draws for this development would be the slip rentals, drystack rentals, boat rentals, campsite rentals, and winter storage. Fuel sales, service, and ancillary sales will supplement the primary revenue centers.

Secondary- Complimentary Services

Restaurant and lodging accommodations represent the secondary profit centers that obtain revenue from marina users and from the general public. For this development, the waterfront location needs to be incorporated into the design of these secondary facilities in order for them to be acceptable uses of Corps property bringing in those who would like to enjoy the waterfront, but who are not necessarily boaters.

Development Costs

Developing costs for the project should include all expected costs. Appendix C includes the development cost detail. Costs for the development plan include:

1. Design and permitting
2. Direct construction costs
3. Property lease fees

Sunk costs, those associated with the initial operation that typically cannot be recouped, are not included in the development plan costs. Sunk costs vary with the development components and cannot be accurately predicted at this stage of design.

Design fees generally range from 4% to 10% depending on the complexity of the project and reducing in percentage of cost as the total budget increases. For this study, permit and lease negotiation are included and the total is included in the direct construction costs.

Direct construction costs include the components identified in the development plan. These construction costs are based on industry standard costs and can vary significantly depending on the developer's design.

Infrastructure development costs are included in the direct construction costs. Assumptions include general availability of utility connections to water, sewer, and electrical systems. Site development costs also include the importation of fill to ensure the building elevations necessary to meet flood zone requirements.

Design, permitting, direct construction, and infrastructure development costs are used to develop an Opinion of Preliminary Construction Costs (OPCC) and are preliminarily estimated at \$25,400,000 for the entire plan. If the lodge and restaurant developments are eliminated from the project, the OPCC is reduced to \$11,700,000.

Development of this parcel could happen with or without lodging and restaurant services. The decision to include these building should be left to the developer. Site design should include the opportunity to add these facilities in a phased manner.

Seasonality

Seasonality is of primary concern for marina operators. The boating season in southern Illinois is longer than the season in the upper Midwest, but is still primarily defined by the summer recreation season, Memorial Day to Labor Day. The shoulder seasons, spring and fall, contribute to the length of the revenue possibilities; but the primary action occurs during the summer.

Lodging and camping seasons are significantly longer and the location on I-57 will allow for occasional snowbird stays during the spring and fall. Winter boat storage and service also lengthens the season.

Lodging and restaurant facilities will provide year round revenue and will enhance the site's reputation as a destination.

Marinas and Symbiosis

Rend Lake is a relatively large lake for southern Illinois and as such it is somewhat underutilized. Carlyle Lake is a regional powerhouse for boating with three active marinas. The difference between the two is that Carlyle Lake has enough variety in marina facilities to enhance its desirability and the marina's interactions with one another add to the variety and excitement of boating.

Rend Lake currently has only one active marina facility. The addition of a second facility, at the other end of the lake from the original one, creates a destination and an opportunity to have dynamic tension between the two. Ideally, events and cooperative entertainments using both marinas would bring more boaters to the Lake and keep them there longer. The lake is more than large enough to support the addition of this marina facility and the added action would benefit both marinas.

Income Feasibility

Per recent USACE direction for another project in the Midwest, considerations in income feasibility include:

- Average Distance to Site- This project has the potential to draw from St Louis, MO to Evansville, IN and from Effingham, IL to Paducah, KY. The site is an Interstate easy drive from these cities and has an adjacent highway entrance. Populations within 30, 60, and 100 miles are 203,500, 600,000 and 4,000,000+, respectively.
- Frequency of Use- Regional marinas are seasonal with their season generally running from mid-April to early October. High season coincides with the traditional summer season Memorial Day to Labor Day with business tapering off during the school season. Weekends will be the busiest, but if the lodging component is introduced, the weekdays will be busy, too. Well run marinas in this region should be at least 75-85% occupied with seasonal boaters.
- Competition- On Rend Lake there is only one other marina and it currently is for sale. It is located at the far end of the lake, with a more difficult access from major highways than the Ina site. Marinas on other lakes have little direct contact with one another. Each of the southern Illinois lakes has its own personality. Rend lake is relatively quiet, but has significant capacity for additional fishing, skiing, and recreational (pontoon boating).
- Location of Competitors- Based on the telephone interviews, other marinas in the region do not see themselves as competitors, they're individual facilities. The successful marinas in the region have branded themselves and their waterbody as a special place. Carlyle Lake is a place for sailboats, Crab Orchard Lake is a fishing and houseboat lake, Rend Lake has yet to fully realize its potential and needs to develop its brand further. Overall, the regional lakes and their marinas operate very independently from each other and the competition factor is nominal.
- Expansion Potential of Competitors-The Rend Lake Marina is fully built out with a full service facility. Efforts to contact the existing owner directly were unsuccessful and information regarding facility was limited. Based on the site's existing limits, few options for expansion are available. The facility is currently for sale and the future owner's plans are unknown. The Rend Lake Resort marina does not operate as a seasonal recreational marina in the traditional sense and is therefore not considered a competitor.

Estimated Income

Estimated revenues for this study are based on the development program layout and rates comparable to those in southern Illinois. Proposing developers should be allowed leeway to adjust the facilities to meet their economic needs. A detailed breakdown of expected revenues is identified in Appendix C. At full occupancy, the development plan income is estimated at:

Primary Revenues	\$2,175,000
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Wet slip leases	\$500,000
Drystack leases	\$684,000
RV Campsite	\$650,000
Outdoor storage	\$ 14,000
Boat Rentals	\$300,000
Auxiliary Sales	\$ 60,000

Secondary Revenues	\$6,900,000
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Lodging	\$5,400,000
Restaurant	\$1,500,000

Since no facility operates with 100% revenue, a factored approach to the expected revenues was developed. Factors vary based on typical marina facility expectations, detailed in Appendix C.

Primary Revenues	\$1,390,000
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Wet slip leases	\$374000
Drystack leases	\$513,000
RV Campsite	\$450,000
Outdoor storage	\$ 12,000
Boat Rentals	\$270,000
Auxiliary Sales	\$ 45,000

Secondary Revenues	\$3,975,000
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Lodging	\$2,700,000
Restaurant	\$1,275,000

Conclusions

The Rend Lake site at Ina has several conditions that recommend it as a marina site. The lake itself is large and underutilized. The Ina location is adjacent to a major interstate highway with nearly perfect access. The lake has several trailer ramps and is popular with fisherman, family boaters, skiers, and silent sports (kayaks, canoes, paddleboarders). Given its location, it has the potential to draw from 60 miles away or more.

Development land along desirable lakes is in very limited supply and obtaining a USACE lease is an opportunity that rarely comes along.

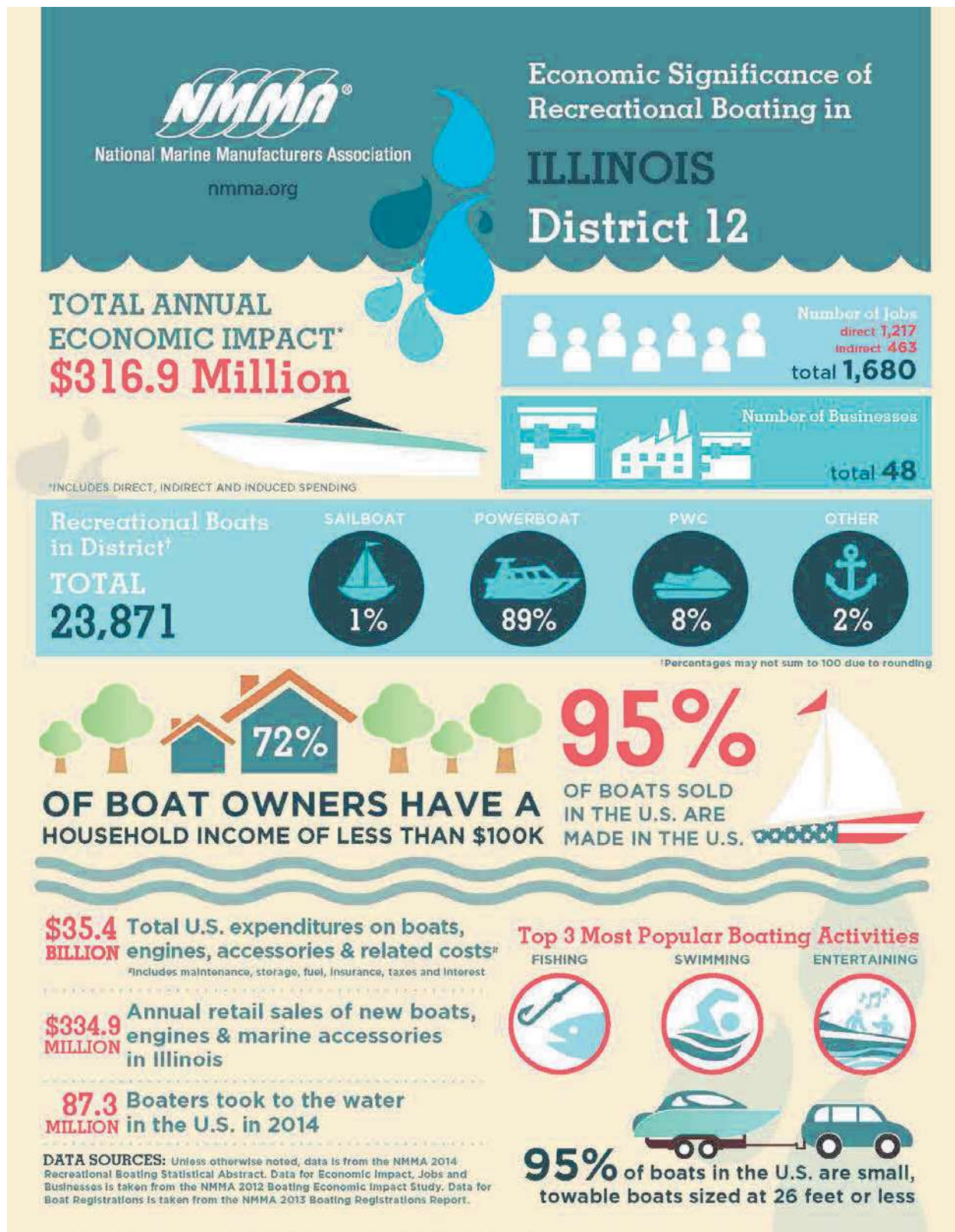
Discussions with USACE management and Jefferson County management revealed an opportunity for Jefferson County to obtain a no cost lease of the property and sublease the site to a qualified developer. Revenues from the sublease agreement would be used to maintain or improve the property.

Marinas and boating manufacturing in general are still recovering from the great recession. Development across the United States has begun to revive and the summer of 2016 has seen occupancy and boat sales rise. Pontoon boats represent the greatest number of sales and these fit well with the southern Illinois boater demographics. Year to year boat sales from March 2015 to March 2016 increased 9.9% (ref. Soundings, Trade Only, June 1016.) The boating industry is actively promoting the recreation and its program is beginning to show signs of success. (Grow Boating)

It is expected that the next few years will see resurgence in boating and demand for marinas. Although this would not be the first of the marina renaissance, the Ina site represents a usable site in a promising location.

Developers understand the risks involved with such an investment and each one has their own approach and evaluation techniques. Sufficient flexibility in the developer's approach should be allowed.

Appendix A Illinois Boat Demographics



Appendix B- Development Costs

Rend Lake Market & Feasibility Study						
Preliminary Opinion of Probable Construction Costs						
					TOTAL	\$ 25,399,051
	Item	Quantity	Unit	Unit Cost	Total	Subtotal
1	Marina					\$ 3,000,000
	Marina dock system	104	ea	\$ 24,038	\$ 2,500,000	
	Basin Preparation	1	Allow	\$ 100,000.00	\$ 100,000	
	Fuel system	1	Allow	\$ 400,000.00	\$ 400,000	
2	Drystack building					\$ 3,484,000
	Drystack building	1	Allow	\$ 2,600,000.00	\$ 2,600,000	
	Drystack Yard	33,400	sf	\$ 10.00	\$ 334,000	
	Drystack Equipment	1	Allow	\$ 300,000.00	\$ 300,000	
	Forklift well	1	Allow	\$ 250,000.00	\$ 250,000	
3	RV Campgrounds					\$ 1,130,160
	Site Development	1	Allow	\$ 100,000.00	\$ 100,000	
	Access Roads	5,135	lf	\$ 112.00	\$ 575,120	
	Campsites	96	ea	\$ 4,740.00	\$ 455,040	
					\$ -	
4	Lodge					\$ 11,780,000
	Rooms	100	Units	\$ 117,800.00	\$ 11,780,000	
					\$ -	
5	Restaurant/ Convenience store					\$ 1,920,000
	Structure	6,400	sf	\$ 300.00	\$ 1,920,000	
6	Site Improvements					\$ 1,328,480
	Utility Supply	1	Allow	\$ 1,000,000.00	\$ 1,000,000	
	Parking and Roads	2,040	lf	\$ 112.00	\$ 228,480	
	Landscaping	1	Allow	\$ 100,000.00	\$ 100,000	
7	Marina Office/ Restrooms/ showers					\$ 875,000
	Structure	3,500	sf	\$ 250.00	\$ 875,000.00	
8	Design and permitting fees	8%		\$ 23,517,640	\$ 1,881,411.20	\$ 1,881,411
	Assumptions:					
1	Marina dock costs include anchoring and gangways					
2	Budget costs for Lodge based on internet 2015 costs for medium development					
	https://www.hotel-online.com/press_releases/release/hotel-development-cost-survey-2014-15					

Unfactored Revenue Profile



LAND
WATER

Factored Revenue Profile



Rend Lake Market Study							
Preliminary Opinion of Revenue Streams							
					Primary	Subtotal	\$ 1,309,075
					Secondary	Subtotal	\$ 4,200,000
						TOTAL	\$5,509,075
	<u>Item</u>	<u>Quantity</u>	<u>Annual days</u>	<u>Occupancy</u>	<u>Unit Cost</u>	<u>Total</u>	<u>Subtotal</u>
	Primary Revenue Streams						
	Wet slips-seasonal						\$ 373,950
	25' Uncovered	48	Seasonal	0.75	\$ 2,400	\$ 86,400	
	30' Covered	44	Seasonal	0.75	\$ 3,300	\$ 108,900	
	40' Covered	18	Seasonal	0.75	\$ 4,000	\$ 54,000	
	45' Covered	18	Seasonal	0.75	\$ 4,900	\$ 66,150	
	50' Covered	9	Seasonal	0.75	\$ 5,000	\$ 33,750	
	60' Covered	6	Seasonal	0.75	\$ 5,500	\$ 24,750	
	Drystack						\$ 513,000
	Dry slips	180	Seasonal	0.75	\$ 3,000	\$ 405,000	
	Indoor storage	240	Seasonal	0.75	\$ 600	\$ 108,000	
	RV campsites (150 nights/ 70% occupied)	96	150	0.7	\$ 45	\$ 453,600	\$ 453,600
	Outdoor storage	45	Seasonal	0.85	\$ 300	\$ 11,475	\$ 11,475
	Boat Fuel	20,000	Gallons		0.05	\$ 1,000	\$ 1,000
	Boat Rentals	10	days rental	150	\$ 200	\$ 300,000	\$ 300,000
	Service	1			\$ 30,000	\$ 30,000	\$ 30,000
	Secondary Revenue Streams						
	Lodge Rentals	100	360	0.5	150	\$ 2,700,000	\$ 2,700,000
	Restaurant/ Convenience Store		Yearly	0.85		\$ 1,500,000	\$ 1,500,000

Appendix D- Typical Graduated Rental System

Reference: Rowena Final Notice of Availability 2015 for Corps Land on Wolf Creek. This is a typical rental agreement for Corps lands.

“CONSIDERATION

a. The rent due to the United States in consideration of this lease shall be calculated using the revised Graduated Rental System (RGRS). The total gross receipts for each rental payment period will be multiplied by the applicable percentage rate and the resulting total due payable within twenty-five (25) days to “F.A.O., USAED NASHVILLE DISTRICT” and delivered to the District Chief of Real Estate, U. S. Army Corps of Engineers, Nashville District.

The percentage rate for the upcoming rental year will be selected from the following RGRS rental rate chart, using the line for the total gross receipts of the ending rental year.

GROSS RECEIPTS (GR)	% RENT
<i>Under \$50,000</i>	<i>2.0%</i>
<i>\$50,000-\$200,000</i>	<i>2.1%</i>
<i>\$200,001-\$400,000</i>	<i>2.2%</i>
<i>\$400,001-\$600,000</i>	<i>2.3%</i>
<i>\$600,001-\$800,000</i>	<i>2.4%</i>
<i>\$800,001-\$1,000,000</i>	<i>2.5%</i>
<i>\$1,000,001-\$1,200,000</i>	<i>2.6%</i>
<i>\$1,200,001-\$1,400,000</i>	<i>2.7%</i>
<i>\$1,400,001-\$1,600,000</i>	<i>2.8%</i>
<i>\$1,600,001-\$1,800,000</i>	<i>2.9%</i>
<i>\$1,800,001-\$2,000,000</i>	<i>3.0%</i>
<i>\$2,000,001-\$2,200,000</i>	<i>3.1%</i>
<i>\$2,200,001-\$2,400,000</i>	<i>3.2%</i>
<i>\$2,400,001-\$2,600,000</i>	<i>3.3%</i>
<i>\$2,600,001-\$2,800,000</i>	<i>3.4%</i>
<i>\$2,800,001-\$3,000,000</i>	<i>3.5%</i>
<i>\$3,000,001-\$3,200,000</i>	<i>3.6%</i>
<i>\$3,200,001-\$3,400,000</i>	<i>3.7%</i>
<i>\$3,400,001-\$3,600,000</i>	<i>3.8%</i>
<i>\$3,600,001-\$3,800,000</i>	<i>3.9%</i>
<i>\$3,800,001-\$4,000,000</i>	<i>4.0%</i>
<i>\$4,000,001-\$4,200,000</i>	<i>4.1%</i>
<i>\$4,200,001-\$4,400,000</i>	<i>4.2%</i>
<i>\$4,400,001-\$4,600,000</i>	<i>4.3%</i>
<i>\$4,600,001-\$4,800,000</i>	<i>4.4%</i>
<i>\$4,800,001-\$5,000,000</i>	<i>4.5%</i>
<i>\$5,000,001 and above</i>	<i>4.6%</i>

(1) Gross receipts are defined as the total of the concessionaire's receipts from business operations conducted on the premises, including receipts of sub-lessees and licensees. No reductions are permitted except the costs of hunting and fishing licenses, and license fees and taxes collected for direct remittance to a taxing authority, and the exact amount collected from customers for electrical service which is metered to the customer and collected by the Lessee as the servicing agent and paid to the power company. Sales receipts from boats and motors are excluded and assessed a straight one- percent rent.)

(2) The rental payment shall be quarterly with the first payment due DATE. The rental year will be for a partial year the first year, beginning on the date of this Lease and ending on 31 December YEAR; for each rental year thereafter the year will begin on 1 January and end on 31 December.

(3) RENTAL PAYMENT CALCULATION FORM Reporting Period ____

a)	Gross receipts for this period:	\$	
b)	Rental rate	x	_____
c)	Amount due (a x b)	\$	_____

IF OPTIONAL BOAT RATE SELECTED:

d)	Boat and motor sales	\$	_____
e)	Rate	x	0.01
f)	Amount due (d x e)	\$	_____

TOTAL DUE	(c + f)	\$	_____
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b. All rent and other payments due under the terms of this lease must be paid on or before the date they are due in order to avoid the mandatory sanctions imposed by the Debt Collections Act of 1982, 31 U.S.C. § 3717. This statute requires the imposition of an interest charge for the late payment of debts owed to the United States; an administrative charge to cover the costs of processing and handling delinquent debts; and the assessment of an additional penalty charge on any portion of a debt that is more than 90 days past due. The provisions of the statute will be implemented as follows:

(1) The United States will impose an interest charge, the amount to be determined by law or regulation, on late payment of rent. Interest will accrue from the due date. An administrative charge to cover the cost of processing and handling each late payment will also be imposed.

(2) In addition to the charges set forth above, the United States will impose a penalty charge of six percent (6%) per annum on any payment, or portion thereof, more than ninety (90) days past due. The penalty shall accrue from the date of the delinquency and will continue to accrue until the debt is paid in full.

(3) All payments received will be applied first to any accumulated interest, administrative and penalty charges and then to any unpaid rental or other payment balance. Interest will not accrue on any administrative or late payment penalty charges."