

**INTRODUCTION: VISION & SCOPE** 



# WISCONSIN STATE PARKS

### **Vision Statement**

The website redesign of Wisconsin State Parks will improve efficiency of land management and continued preservation of natural and recreational resources. Wisconsin State Parks will provide long term benefits for the enjoyment of hunters, anglers and visitors alike.

# **How Might We...**

Make researching a state park or booking a campsite an enjoyable experience so tourists can visit in confidence?

# **The Project**

Wisconsin State Parks website is currently buried within the Department of Natural Resources (DNR) website. A newly redesigned website is long overdue that provides visitors easy to access information and reflects the true beauty of our state.

# **Design & Experience Requirements**

- » Wisconsin State Parks has its own logo and branding standards
- » The online presence of Wisconsin State Parks is a well designed website with easy to use navigation
- » All state parks are open, accessible and welcoming
- » High quality recreational opportunities are available throughout the state park system
- » Every state park has well-maintained amenities, public access points, clean restrooms, and available staff to assist visitors
- » All visitors have access to basic park information and materials to help them plan trips to state parks
- » Every visitor has access to equipment and/or programs to aid them in using and enjoying state parks

# **Proposed State Park Features**

- » Find a park with associated maps, events, and services each park offers
- » View accessibility services such as wheelchair friendly parking, trails, fishing piers and hunting blinds
- » View nearby attractions
- » View rules/regulations
- » Purchase vehicle admission stickers
- » Reserve a campsite
- » Event calendar with park events and volunteer opportunities

# State Parks belong to the people

Wisconsin welcomes visitors to enjoy the diverse natural places and historic resources that provide recreational opportunities. At the heart of an excellent state park system is the experience of its visitors. Cultivating and maintaining an environment where visitors are welcomed and provided access to services and amenities will it increase their enjoyment for state parks.

#### **Wisconsin State Park System Includes**

- » 52 state parks
- » 8 southern forests
- » 8 recreation areas
- » 41 state trails extending for 1,980 miles and over 150,000 acres

#### **Economic Impact of State Parks**

Camping, hiking, hunting, fishing, boating, cross country skiing and other outdoor activities common in our state parks contribute to our quality of life while making Wisconsin a major tourism destination. Wisconsin state parks hosted approximately 15.3 million visits in 2018.

The annual income from visitors is estimated to be over 1 billion dollars per year. Each visitor spends an average of 41-90 dollars per day. The state park system supports more than 8,220 private sector jobs, equating to \$350 million dollars of income for Wisconsin



A benchmarking analysis was done to conduct market research and expose good and bad user experiences of the competition. The research provided insight into current trends and revealed outdated government and non-government solutions for information on Wisconsin State Parks.

COMPETITOR	PURPOSE	REVENUE STREAMS	MONTHLY TRAFFIC	SOCIAL NETWORKS	PERSONALIZATION	COMPETITIVE ADVANTAGE	ANALYSIS
DNR State Parks (2012) dnr.wi.gov/topic/parks	Sub/Gateway page within the main WI DNR website. Find a park, View Events, Find Volunteer Opportunities and Accessibility Services	Approx. 70% of revenue (\$15.2 Million) comes from park visitors. The remaining 30% comes from the State Budget.	1.15 million	No official state park social media page exists properly promoting or utilizing hashtags	None	A centralized landing page for parks within the DNR website gives users the ability to find a park, reserve a campsite, purchase admission stickers, view events and programs, and find volunteer opportunities all in one place	State websites are dated and it's disappointing that state parks are buried within the DNR website and info is not maintained. Parks are buried in the main website and takes the user through a series of clicks to get info they need
Travel Wisconsin (2015) travelwisconsin.com/things-to-do/outdoor-fun/natural-attractions-parks/state-parks	Sub/Gateway page within the Travel Wisconsin website. Find a park by city, region, mile range. Also filter by pet friendly, travel green, on water, disabled access or free admission	\$13.2 million approved in the state budget for 2018, in addition to \$1.5 million in tourism grant awards	520,000	No official state park social media page exists for State Parks specifically. Although they do encourage users to post pictures in Instagram using the #ScenicWisconsin hashtag	I can create an account that is easy accessible from the top navigation. Quickly after signing up I was able to view a "my dashboard" page with my "recent favorites" for a trip planner	A centralized landing page for parks within the Travel Wisconsin website gives user the ability to search for a State Park by a city, region, or mile range or custom filter such as disabled access in one place.	There's not much here that isn't already in the DNR website. To find a State Park I have a few more filters to work with. It's great to see that at least there is a general hashtag that they are encouraging users to use on social media. It seems they have more budget to work with so it is professionally updated and maintained
StateParks.com (2006) Stateparks.com/wi.html	According to the website, StateParks.com collaborates with numerous government agencies, departments and bureaus to bring all of America's park resources together in one easy to find location.	It appears that business owners can list their "park related business" for \$59/year on the website	150,000	None	None	Delivers far more information on the history of the area, camping description, trails, weather outlook and nature programs than any other State Parks website. It also displays reviews from visitors of the park.	Other than providing more content/info to the user on each state park, it does not provide much value. Since it has a good domain - StateParks.com that it will always have visitors



# **DEBRA** The In-State Park Visitor

#### **Research Methods Used**

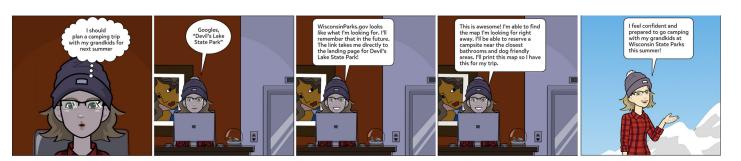
Phone Interview & Critical Incident Technique

#### **Scenario Narrative**

Debra is a lifetime Wisconsin resident who enjoys visiting state parks with her children and grandchildren. In between her busy schedule of being a certified nursing assistant, elderly caretaker and AirBNB host, she plans to use her limited vacation time to visit state parks and natural areas.

#### **Task Analysis**

- 1. Debra likes to be prepared and plan ahead for next year. She usually reserves a campsite at Devil's Lake State Park a year in advance since she knows this is a busy and popular park. She wants to know which areas of the park are dog friendly and which campsites are closest to updated bathrooms and showers. Debra Googles, "Devil's Lake State Park."
- 2. The first result is WisconsinParks.gov/DevilsLake. The URL is obvious enough for her to remember in future. The link takes her directly to the landing page for Devil's Lake State Park.
- 3. The navigation of the landing page for Devil's Lake State Park is easy to use. The navigation hierarchy is as follows:
- » Explore (Maps, Park Information, Park Hours, Admission Cost, Amenities)
- » Reserve Campsite (takes her to Wisconsin.GoingtoCamp.com)
- » Things To Do (Activities, Park Events, Volunteer Opportunities, Areas of Interest)
- 4. She clicks on "Maps," in the navigation. From this page she is able to view all available maps and descriptions and find the one she needs. She is able to print from this page and bring it with her on her visit. This map clearly displays bathrooms, campsites and dog friendly areas. Having all the information easy accessible makes her feel confident and prepared for her visit.



# **CURT** The Hunter/Angler

#### **Research Methods Used**

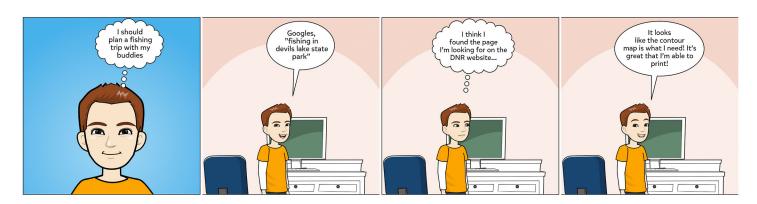
In Person Interview, Observation & Critical Incident Technique

#### **Scenario Narrative**

Curt has lived in Wisconsin for the past 10 years. In his personal time, and especially during hunting and fishing seasons, he is interested in getting information on natural areas and state parks near him that he can hunt and fish.

#### **Task Analysis**

- 1. Curt is planning a fishing trip with two of his fishing buddies. He Googles, "fishing in devils lake state park." He knows that the DNR website includes maps of the lake, boat launch locations and rules regulations. The DNR website is not the top Google result but he finds the page he needs fairly quickly.
- 2. Curt is taken to a cryptic URL that he probably won't remember in the future https://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=980900.
- 3. On the landing page for Devils Lake within the DNR website, he sees the following links:
- » Features (Boat Landings, Public lands or parks within 1000 feet of the lake, and Beaches)
- » Fish Species (Panfish, Largemouth and Smallmouth Bass, Pike, Trout and Walleye)
- » Before You Go (Local Boating Ordinances, Fish Consumption Advisories, Regulations)
- » Maps (Contour (Bathymetric) Map and Interactive Map)
- 4. He clicks on, "Contour Map," which pulls up a map of the lake that displays locations of the boat launch, parking and water depth. He is able to print from this page and bring it with him on his visit.







"It is important that I'm prepared before I make a trip to a state park with my grandkids"



# **DEBRA** The In-State Park Visitor

Age: **53** 

Marital Status: **Divorced** 

Occupation: Certified Nursing Assistant/AirBNB Host

Location: Oshkosh, Wisconsin

Interests: Guest Accommodation, Interior Decorating, Hiking,

**Camping, Shopping, Quality Family Time** 

	LOW	MEDIUM	HIGH
:DS	Dog Friendly		
NEEDS	Clean Bathrooms		
_	Information Access		
TASKS	Campsite Reservation		
ΤĀS	Download Maps		
•	Social Sharing		
GE	Troubleshooting		
Ä	Technology		
KNOWLEDGE	Trends		
X	Social Media		

# **Debra's Questions**

Can I visit state parks and natural areas that allow dogs?

Are the state park hiking trails easy enough terrain to bring my young grandchildren with?

Are the campsites I'm reserving wooded and have reasonable distance from eachother? Are the campsites also within walking distance to clean bathrooms?

### **Debra's Goals**

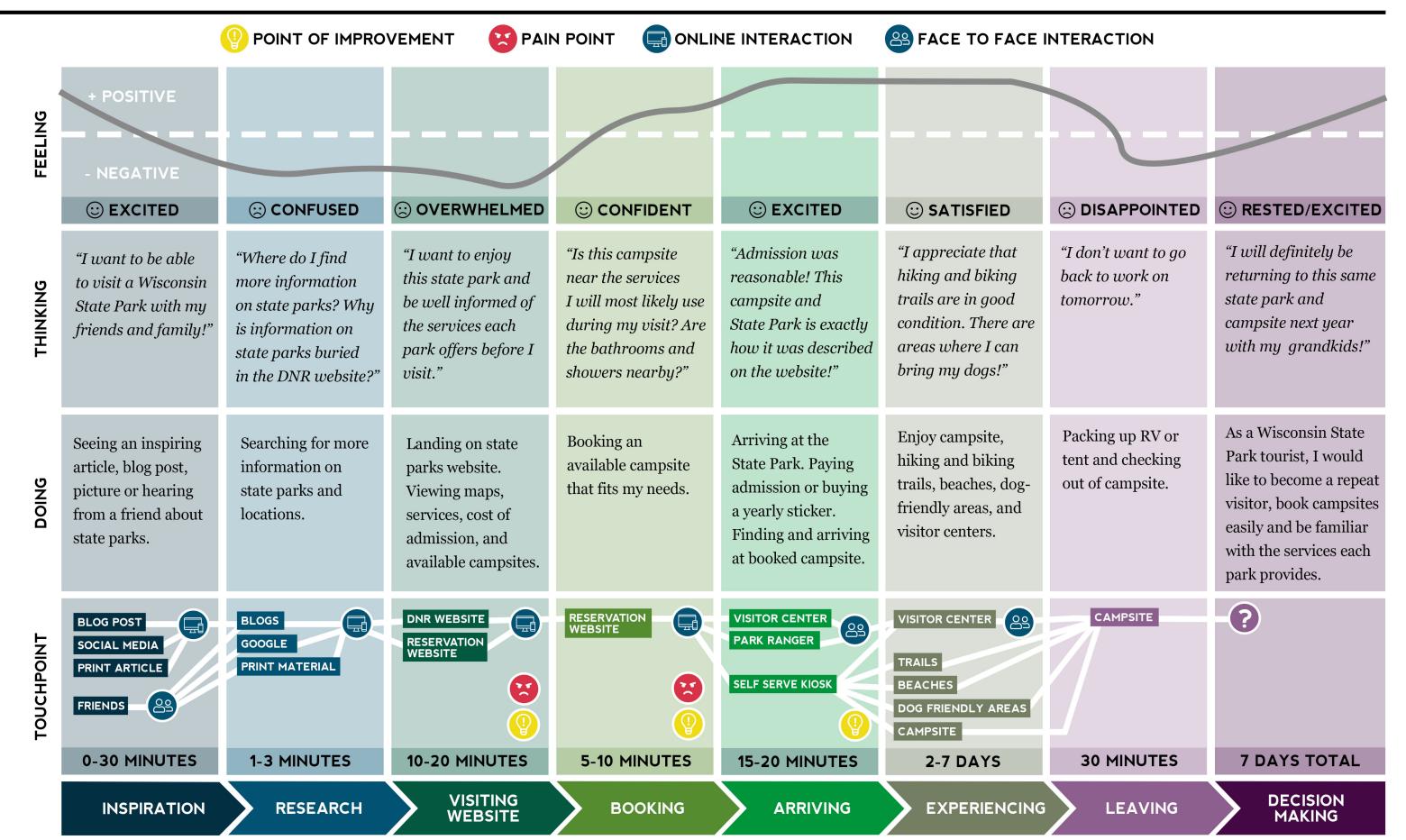
Life Goals: Debra is 53 years old and wants to be a good mom, grandma, and employee. Her educational background includes a certification for a certified nursing assistant (CNA). Over the years she's had various job titles – stay at home mom, nail artist, customer support, technical support, factory worker, and a CNA. She currently works at a local hospital as a CNA in the emergency department. She also has her own business where she visits elderly clients living on their own needing extra assistance with laundry, cleaning and cooking meals. In her personal life while being a mom and grandma, she enjoys spending time with her 3 daughters and 4 grandchildren at State Parks in Wisconsin throughout the summer months.

**End Goals:** Because Debra's work demands long hours and is physically and mentally stressful it is important for her to take time off and enjoy her limited vacation time. She rarely travels out of the state or country for vacation so she uses state parks an estimated 15 times per year from April-October. Debra wants to plan a visit to a state park ahead of time.

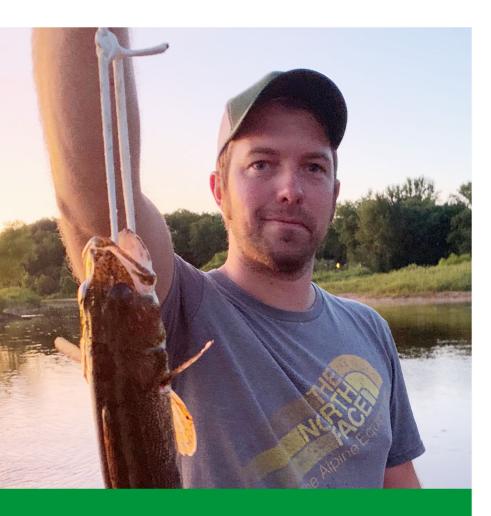
**Experience Goals:** Debra has an older smartphone and is somewhat comfortable with technology. When planning a visit to a state park, she wants to view facilities, services and campsites ahead of time. It is very important that state parks have clearly identified areas that are dog friendly. It is also important that the bathrooms also have clean showers and are reasonably updated.

**Pain Points:** In the past, she has visited state parks where she has issues bringing her dogs on hiking trails or using a public beach. When doing research on a park that she has never visited before, it's hard to find maps that indicate which areas allow dogs.

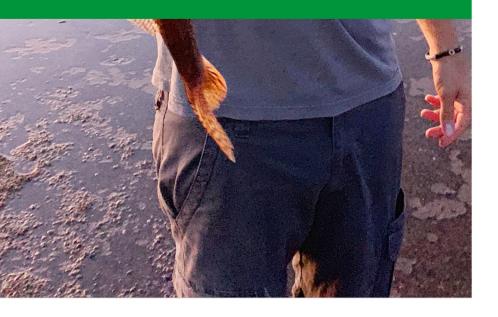








"It is important to be a well-informed hunter and angler that successfully registers a catch or harvest"



# **CURT** The Hunter/Angler

Age: **33** 

Marital Status: **Married 8 Years** 

Occupation: Wetland Specialist/Soil Scientist

Location: Wisconsin Dells, Wisconsin

Interests: Hunting, Fishing, Tracking, Hiking,

Plant and Animal Identification, Natural Resources

	LOW	MEDIUM	HIGH
DS	Land Availability		
NEEDS	Information Access		
_	Successful Harvest		
S	Correct Errors		
TASKS	Download Maps		
F			
	Social Sharing		
GE	Troubleshooting		
H	Technology		
×	Trends		
KNOWLEDGE	Social Media		

# **Curt's Questions**

Can I visit state parks and natural areas easily and access information on the go with little to no technical knowledge without frustration?

Can I trust issued information to be correct and contribute if there are errors? I'm always worried about property lines so it is important that I know where it is safe to hunt outside of range of roads and buildings.

### **Curt's Goals**

**Life Goals:** Curt is 33 years old and wants to be a good dad, husband and employee. After high school he spent 10 years working as a general laborer in various jobs – construction, cable installation and factory jobs. He decided to go to back to school when he was 25 to pursue a degree he feels passionate about, natural resources. He graduated at age 30 with his 4 year degree in forestry and conservation. Since Curt only owns a few acres of land himself, it is important that he have access to state owned land and state parks where Curt, his wife and daughter can hunt and fish on. He is familiar with hunting seasons, regulations and property boundaries of public land near where he lives.

**End Goals:** Curt would like to be able to contribute in updating maps and information on state owned land without having to contact a web administrator. Especially during hunting season, he is interested in getting easily accessible information on state owned land he is unfamiliar with.

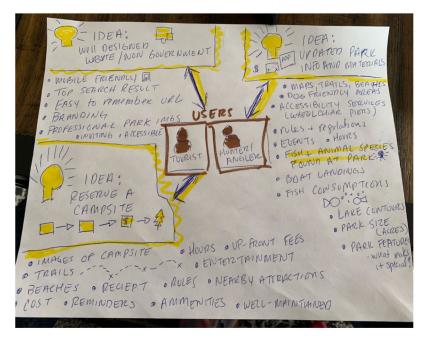
Experience Goals: Although Curt has the latest smartphone, he isn't the most efficient at using a laptop and gets frustrated with technology easily. He can do basic tasks such as checking writing and emails. He has experience in Geographic Information Systems (GIS) and uses ARCGIS in his job quite often to update boundaries of public property that he manages. He finds that ARCGIS is dated and it took him a long time to learn. He wants to feel comfortable and confident with an interface that requires little training.

**Pain Points:** Maps aren't necessarily available for download for offline use on the DNR or state park website. He has used alternative apps for this – OnXHunt (\$29.99/year) to view property boundaries and regulations.



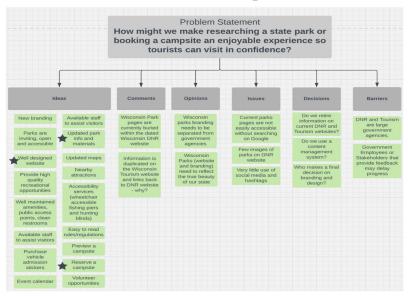
# **Sketching & Brainstorming**

Generative ideation and sketching for an hour, generating as many ideas as possible for the project (targeting 10-15 ideas).



# **Affinity Diagram**

A list of all the ideas generated and grouped into the clusters. Identification of three top ideas.



### **Ideation**

#### Idea 1: Well Designed Website

Wisconsin State Parks website is currently buried within the Department of Natural Resources (DNR) website. A newly redesigned website is long overdue that provides visitors easy to access information and reflects the true beauty of our state.



### Idea 2: **Reserve a Campsite**

In 2018, The Wisconsin State Park System hosted almost 20 million visits and collected over \$15.3 million in revenue. This revenue has a direct and important positive impact on the local and regional economies. \$7.6 million of the 2018 revenue was collected from campsite reservations.



#### Idea 3: Updated Park Information & Materials

All state park visitors will have access to information and materials to help them plan a trip to state parks. This includes maps, events, volunteer opportunities, nearby attractions, rules/regulations, admission costs, and services.



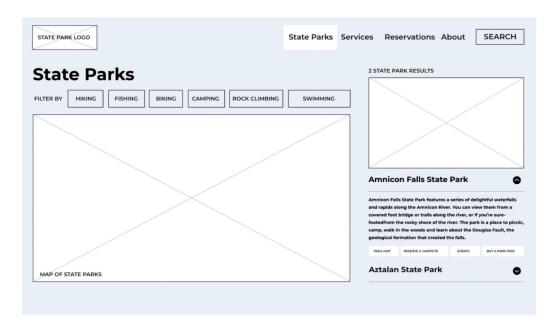
# **Design Iteration**

#### Idea: Updated Park Information & Materials

The landing page for state parks will contain an interface that will present content in a way that matches prioritized information based on user feedback. The use of value, space and size will clearly define hierarchy of parks and guide users from one action to the next without feeling overwhelmed.

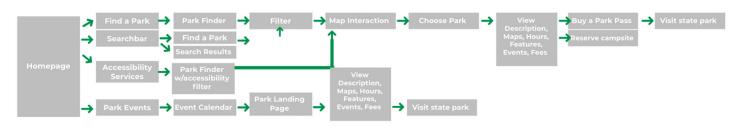
#### Idea: Park Finder

In this sketch I'm using a grid and layout to enable users to quickly filter state parks by activity or by clicking on the map. The scrollable state park results will display on the right hand side. More info will display when a user clicks on the expandable down or up arrow to reveal more information. This is important because the gestalt theory is based on the idea that the human brain will attempt to simplify and organize complex images or designs that consist of many elements, by arranging the parts into an organized system that creates a whole, rather than separate elements.



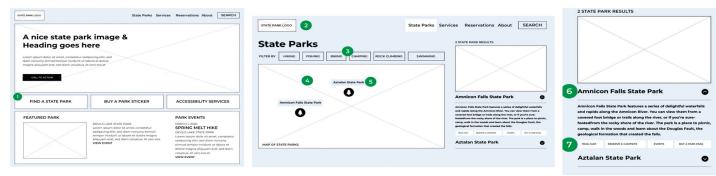


# TASK FLOWS A visual representation of a specific route that a user might take through your site to achieve a goal



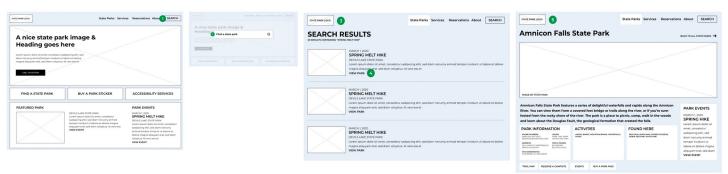
### Find a Park

The primary reason for users to visit the state park website is to find a state park. The call to action button for the state park finder will be easy to find on the homepage linking to the state park finder landing page. The user will be able to interact with the map to display parks within the area selected. After a user clicks on a park on the map, more information about the park will display on the right hand side of the page. Since space is limited and the list of state parks is lengthly, the parks list and info will be condensed into accordions.



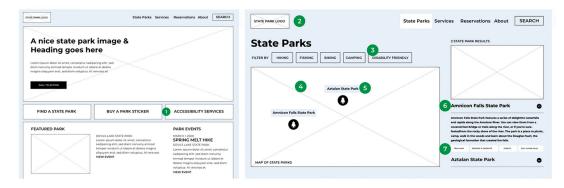
### Find a Park with Search

If a user knows what state park they are looking for, the searchbar is readily available at all times in the global navigation located on the top right hand side of the page. Searchbars are a common UX pattern that users are familiar with using making finding what the user needs on the site a quick, easy and enjoyable experience.



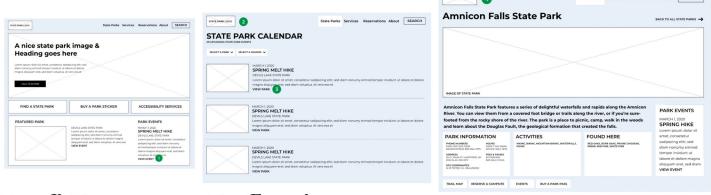
# Find a Park with Accessibility Services

It is important to have an accessibility filter readily available for users with disabilities to know they can visit state parks in confidence. Wheelchair friendly hunting blinds, fishing piers and hiking trails are some of the features I would like to highlight.



### **Find a Park Events**

An accurate calendar of events for each park keeps visitors engaged that results in a user visiting the same park multiple times over a time period. The user will have the ability to filter by park, season or maybe even where Smokey the Bear will be that day!



# **Lo-fi Prototype Reflection**

Need feedback on how to organize and prioritize information on the park landing page. A state park "found here" section might be a fun way to inform users about their surroundings at a state park... tell the user what is unique about this property. Print materials at state parks could support this experience by offering simple identification guides.





As a state park visitor, I need to easily find a state park with associated images, description, maps, events, activities, wildlife & services each park offers.

### **Heuristic Evaluation Results**

An expert review and usability inspection completed by Carolyn Wolff focusing on heuristic evaluation and cognitive walkthrough.

#### Homepage Feedback

- » Excellent "call to action" language "view park" may be a little vague.
- » "Utility bar" style links same throughout all screens and search bar. Also consistent with typical placement of search bar on many other sites! Popular 3 CTA button design.
- » Not sure what "services" and "reservations" all entails since pages are not yet available.
- » If reservations or sales are made through this site, unsure if a login area is needed.
- » Very fresh, well organized, keeping the eye moving. Featured park area isn't too big or distracting. I would make the park name larger for the event section, since that's just as important (if not more important) as the event name in my mind.
- » No inherent contact info or place to search FAQs.

#### **Park Finder Feedback**

- » Map helps you identify location or results, and you get the little side breakdown of the sorted results and how many.
- » Potential for "accessible" to be misunderstood? Don't know if "ADA accessible" or some other indicator could help.
- » Accordions should be expanded by default
- » All the filter categories are seen at once. If there are more, maybe some indication of how to explore more filter options.

#### Park Landing Page Feedback

- » I like the "found here" section even if it took me a bit to connect what the "here."
- » Add option to "favorite" a park and save it to your profile and add notes.
- » Providing photos would help people mentally remember a park better than just a name.
- » Add more iconography. Some of the text seems much smaller in comparison with other text.

# **Usability Testing Results**

A 1-hour remote usability test was scheduled with a state park user. The feedback the state parks website was valuable and it identified the task flows that needed work. Using an Adobe XD mockup, a test was completed to see if a user can perform the following tasks.

#### Find a park

- 1. On the homepage, can a user find the state park finder linking to the state park landing page?
- 2. Does the state park finder page provide enough filters and map interaction to narrow down the results the user is looking for?
- 3. Does the right hand sidebar with results display enough information for the user to click on secondary actions related to that state park (reserve a campsite, see events, etc.)
- 4. Overall thoughts on finding a park?

#### Find an event/park with search

- 1. From the homepage, can a user easily find the searchbar?
- 2. Can a user type in events/parks in the searchbar?
- 3. Is the search results page easy to scan and choose an result without frustration?
- 4. Does the user end up on park landing page or event landing page the user was expecting?
- 5. Overall thoughts on search workflow?

#### Find park events

- 1. From the homepage, can a user easily find park events?
- 2. From the events page, can the user find the event they are looking for Devils Lake Hike?
- 3. Can the user click on the event to find more information such as time, location?
- 4. Overall thoughts on finding an event?

#### **Session Reflection**

Overall, the testing went well but made it apparent that there were some holes in some of the workflows. The park finder page can display a shorter description and less actions. From the park finder page, a user should be able to click on the park results to display the park landing page which provides all the information needed for that particular park.

# WISCONSIN STATE PARKS USABILITY TESTING RESULTS



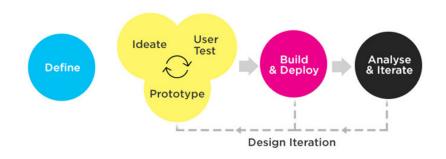
A remote user test was completed to investigate and observe if a user can perform the following tasks.

Task	Will the user try and achieve the right outcome? (Yes/No)	Did the user notice that the correct action is available to them? (Yes/No)	Will the user associate the correct action w/ the outcome they expect to achieve? (Yes/No)	If the correct action is performed; will the user see progress made towards their intended outcome? (Yes/No)	Overall thoughts?	Three sustains and three improves
Find a park	Yes	Yes	Yes	Yes, the back button is available	The filters above the map are important, especially "accessible"	State park finder page is a good design, hierarchy of the page makes sense. Filters by activity of feature make sense, might need to expand these options further. Secondary buttons that display on search results seem hidden. Nicky suggested that I remove all of these buttons except for "view park." On the park landing page - Nicky was ok with not having icons or images on this page. For activities, having images in there might help draw a user to visit a park because of activity – for example hiking trails. For search results, display activity with icons in the sidebar. Maybe remove sidebar buttons all together since they are in the park page.
Find an event/park with search	Yes	Yes	Yes	Yes, clicking outside of the searchbar, closes the searchbar overlay. Search is always readily available on all pages on the top right of the page	Search is easily found on all pages	Searchbar placement on the site is good.  Searchbar animation how it appears on the page is obvious. The placeholder text within the searchbar should change to something different than Find a State Park, maybe Search State Parks? On the search results page, add in image for state parks for park results, and add a calendar icon for an event. Change the call to action button to just "view."
Find park events	Yes	Yes	Yes	Yes, back button is available	Finding an event from the homepage is obvious	Date is good at the top of the event. Select a season might need to be changed to by month. Change to a calendar picker with date range? Remove view park button and replace with view event – create landing page for that particular event (this part of the workflow is missing).

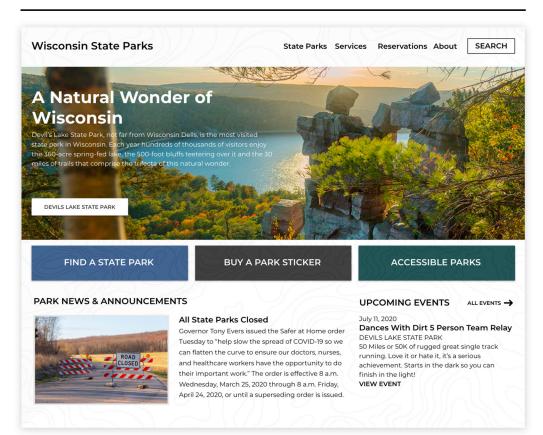
# WISCONSIN State Parks & Trails

# **Iteration & Improvements**

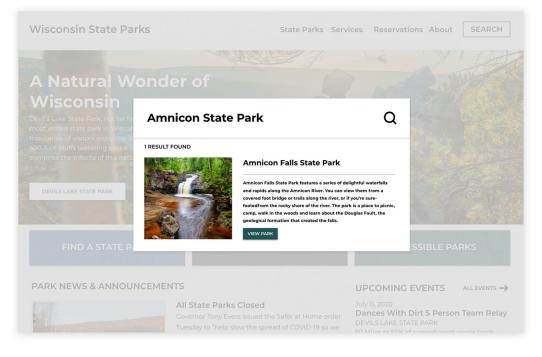
For the final project pitch, the design was enhanced to look and function like the end solution. Images, button styling and descriptions were added to the homepage elements. The searchbar text was updated based on user feedback and results were added inline in the page instead of a separate search results page. The park finder was enhanced to include a real Google map with popovers that include state park information. A preview image of the park result in the right sidebar was added and all button actions were removed from this sidebar. One button was added, "view park" which takes the user directly to the park landing page. The park landing page has gone through several iterations in the last few weeks. Most of the changes included adding content users would likely want to see in the correct order on the page.



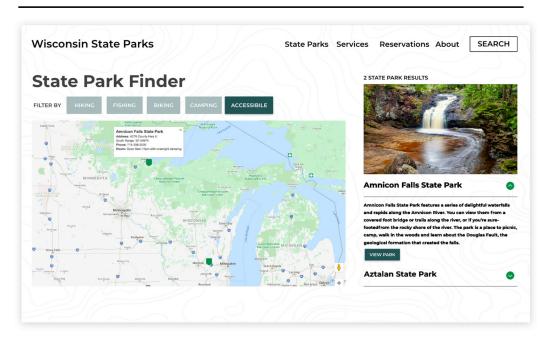
# Homepage



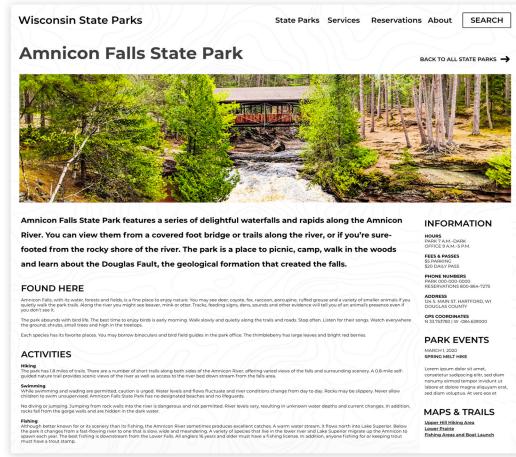
### **Search Results**



# **State Park Finder**



# **Park Landing Page**





**Come From** 

WI

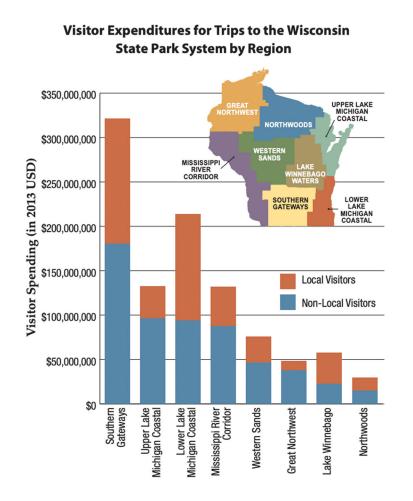
# WISCONSIN STATE PARKS

### **Conclusion**

In conclusion, it's past due for a redesign of our state parks. The online presence needs to reflect the true beauty of our state. We need to take pride and ownership of our parks and provide easily accessible information to all users who plan on visiting.

### References

**Economic Impacts of the Wisconsin State Park System** published by the Wisconsin Department of Natural Resources. Provides data on user behavior and spending by state owned property type and activities they offer. https://dnr.wi.gov/topic/parks/documents/EconImpact2013.pdf



		2013 USD) Sector-Specific Pattern of Individual Daily Visitor Expenditure								
	Accommodations	Restaurants & Bars	Gasoline & Auto	Groceries & Liquor	Entertainment	Misc. Retail	Fees & Licenses	Equipment Rental	Equipment Purchase	Tota
State Park	\$8.72	\$9.14	\$11.42	\$7.91	\$2.35	\$2.82	\$2.29	\$1.24	\$4.61	\$50.5
State Rec Area	\$13.28	\$11.37	\$15.53	\$6.12	\$2.51	\$2.60	\$1.74	\$2.89	\$11.38	\$67.4
Southern State Forest	\$10.37	\$7.57	\$7.52	\$5.46	\$1.64	\$2.32	\$1.59	\$0.51	\$3.96	\$40.9
State Trail	\$20.20	\$21.55	\$16.18	\$8.35	\$2.69	\$7.55	\$0.69	\$3.45	\$9.79	\$90.4

Table 4. Summary	of State Propertion	es, Visitor Spending, ar	nd Percentage of To	otal Visitor Spending	by Property Type			
		Visitor Spending						
Property Type	Number of Properties	Non-Local Spending Local Spending To		Total Spending	Percent of Total Spending*			
State Park	45	\$439,443,000	\$256,726,000	\$696,169,000	68.9%			
State Recreational Area	4	\$34,454,000	\$35,110,000	\$69,564,000	6.9%			
Southern State Forest	6	\$65,094,000	\$75,356,000	\$140,450,000	13.9%			
State Operated Trails	14	\$40,582,000	\$63,813,000	\$104,395,000	10.3%			
Total All Properties*	69	\$579,573,000*	\$431,005,000*	\$1,010,578,000*	100.0%			

\* May not sum to totals due to rounding

**Wisconsin Land Facts** published by Department of Natural Resources Bureau of Parks & Recreation. Outlines total visitors, economic impact, staff, accomplishments, funding, attendance and operation costs.

https://dnr.wi.gov/about/documents/FactSheets/FactSheetParks.pdf

#### **Annual Economic Impact**

Annual expenditure patterns of visitors total more than \$1 billion dollars per year. The average individual trip spending of visitors ranged from \$41 to \$90 per day. The state park system supports more than 8,220 private sector jobs, equating to \$350 million of income for Wisconsin residents. **Where Park Visitors** 

Approximately 70% of the
Wisconsin State Parks System
operating budget comes from
strong and increasing
customer support. The
Wisconsin State Parks System
budget made up of segregated fr

budget made up of segregated funds
has increased from 47% percent to 69%.
Wisconsin State Park System hosted almost
15.3 million visits and collected revenues over \$15.3 million in

15.3 million visits and collected revenues over \$15.3 million in 2018. This revenue has a direct and important positive impact on the local and regional economies.