MINNESOTA SCHOOL TRUST LANDS

RECREATIONAL USE STUDY

JANUARY 2026

THE NAVIO GROUP

Cost of Preparation

In accordance with Minnesota Statutes, section 3.197, the approximate cost of preparing this report was $350,000.This includes $318,000 for professional services and an estimated $32,000 for staff time from the Office of School Trust Lands (OSTL) and the Department of Natural Resources (DNR). Costs for staff time were estimated based on typical hourly salary and benefit rates for personnel involved in data review and report preparation.

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Executive Summary

This study evaluates the extent of public recreational use occurring on Minnesota's school trust lands (STLs). The Minnesota Office of School Trust Lands (OSTL) conducted this analysis to meet a legislative requirement to quantify recreational activity on STLs and determine the share of statewide recreation that takes place on these lands. Covering the period from 2020 through 2024, the study examines multiple categories of outdoor recreation, including hunting, fishing, boating, state forest camping, trail-based activities, and the presence and use of STLs within state parks and recreation areas.

The study integrates data from numerous Minnesota Department of Natural Resources (DNR) divisions, supplemented by Geographic Information System (GIS) analysis provided by Minnesota IT Services (MNIT). Because recreational datasets differ in precision and availability, particularly regarding the specific locations where recreation occurs, the study employs tailored methodologies for each recreation category. These methods combine survey data, participation estimates, license records, trail mapping, and spatial overlays to generate credible, data-informed estimates of STL use for recreational purposes.

This analysis represents the first comprehensive, statewide quantification of recreational use on school trust lands in Minnesota. As such, it provides OSTL and DNR with new insights into how Minnesotans engage with these lands and establishes a foundation for more informed policy and land management decisions. While the findings are estimates rather than parcel-level measurements, they reflect the best available data and expert-reviewed analytical approaches.

The Legislature also directed OSTL to assess the potential costs of adding signage and updating maps to indicate school trust land locations. These requirements were addressed through cost analyses developed by OSTL in consultation with DNR staff, drawing on established cost data, existing signage programs, and precedents from other DNR-managed recreational assets.

In addition, the study includes a comparative review of how five other states manage recreational access and activities on their trust lands. This information provides context for Minnesota's current approach and presents potential models the Legislature, DNR, and OSTL may consider when evaluating future policies related to recreational use and school trust land management.

Minnesota's school trust lands play a multi-faceted role in supporting outdoor recreation statewide, and this study demonstrates that recreation on these lands is not incidental; it is foundational to the state's public-land recreation system. Although STLs account for roughly 5% of the state's land base and their statewide share of total recreational use generally mirrors this proportion, their regional influence is considerably greater. In northern Minnesota, where STLs are more abundant, these lands provide critical access points, major trail corridors, habitat that supports popular game species, and a large share of state forest camping opportunities. In these areas, school trust lands play a disproportionately important role in sustaining outdoor recreation and ensuring public access to high-quality natural landscapes.

The Navio Group

OSTL selected The Navio Group (Navio) through Minnesota Management and Budget's Management Analysis and Development external vendor program to support the development of the study. Navio is a consulting firm headquartered in the Twin Cities and has served clients since 2018. Although the firm's work primarily focuses on consumer-oriented organizations in the private sector, it applied its established analytical methods and technical expertise to meet the study's legislative requirements.

Project Team and Subject Matter Experts

OSTL leadership and staff worked closely with Navio throughout the development of this study. The teams met regularly to ensure that Navio consulted the appropriate subject matter experts within the Minnesota Department of Natural Resources (DNR) and engaged with trust land officials in other states. OSTL provided guidance on methodological and analytical approaches, coordinated information-gathering activities, and reviewed and revised major portions of the draft study to ensure accuracy, clarity, and alignment with statutory requirements.

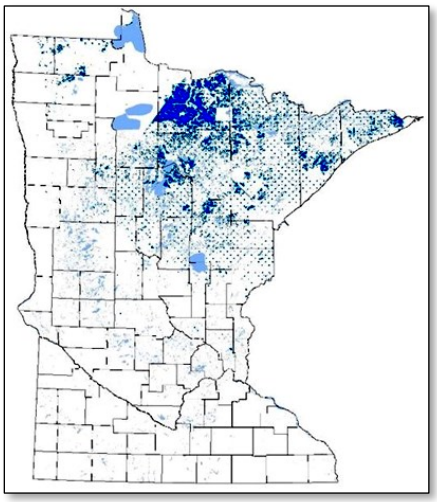
Throughout the project, Navio collaborated with DNR subject matter experts (SMEs) across multiple divisions. These individuals contributed specialized knowledge in areas including Geographic Information Systems (GIS), the DNR License Center database, and each of the recreation categories addressed in the study. SMEs identified and supplied data used in the analyses, validated methodological approaches, and reviewed the final versions of the sections related to their areas of expertise.

Background

Minnesota's Constitution designates school trust lands (STLs) to be managed for the long-term financial benefit of the state's public schools. Today, Minnesota holds approximately 2.5 million acres of STLs, along with one million acres of severed mineral rights. These lands were granted to the state at statehood for the express purpose of generating revenue for public education.

The distribution of STLs reflects 19th-century land divestment decisions, when the state sold much of the school trust land in the southern part of Minnesota to private interests. As a result, large contiguous blocks of STLs remain in the forested counties of northern Minnesota, while comparatively few parcels exist in the agricultural and metropolitan regions of the southern half of the state (see Figure 1). This uneven pattern has long-term management implications: both the revenue-generating opportunities and the recreational activities on STLs vary substantially across regions.

Figure 1: Map of Minnesota's school trust lands



The Minnesota Department of Natural Resources (DNR) manages the state's school trust lands, while the Minnesota Office of School Trust Lands (OSTL) provides advice and recommendations to ensure management decisions align with the state's fiduciary obligations. Historically, STLs have supported a mix of revenue-generating activities, most notably mining and timber harvesting. At the same time, these lands have become increasingly important for outdoor recreation including hunting, angling, boating, ATV riding, snowmobiling, and general public access.

Legislative Directive

In 2024, the Minnesota Legislature directed OSTL to conduct an analytical study of recreational use on STLs "to determine the amount of money to be allocated to the Permanent School Fund (PSF) for fees paid to the state for outdoor recreation purposes." The study was tasked with establishing credible, data-informed estimates of the scale and nature of recreation occurring on STLs and assessing the potential financial implications for the PSF.

Specifically, the legislation directed OSTL to evaluate:

- **Hunting:** The estimated annual visits by licensed hunters on STLs.
- **Fishing:** The estimated annual visits by individuals with Minnesota fishing licenses using public water access sites (PWAs) on STLs.
- **Boating:** The estimated annual visits by Minnesota-licensed watercraft to PWA sites on STLs.
- **Trail-Based Recreation:** The total miles of state-maintained snowmobile and all-terrain vehicle (ATV) trails located on STLs.
- **State Parks and Recreation Areas:** The total acreage of STLs located within state parks and recreation areas.
- **Other Permitted or Fee-Based Uses:** The percentage of permits or fees for any other outdoor recreational uses on STLs that require a permit or fee.
- **Signage:** The estimated cost of posting signage at STL entrances.
- **Maps:** The estimated cost of updating printed and electronic maps to identify STLs.

The geographic scope of the study includes approximately 2.5 million acres of Minnesota's school trust lands. The temporal scope focuses on the period from 2020 through 2024, the most recent timeframe for which complete and comparable datasets exist across most recreation categories.

Overall Methodology

To fulfill these requirements, the study integrates data from multiple DNR divisions, supplemented by Geographic Information System (GIS) analysis provided by Minnesota IT Services (MNIT). Because recreational datasets vary in precision, completeness, and geographic specificity, particularly with respect to the exact locations where activities occur, the study employs tailored methodologies for each recreation category. These approaches combine survey data, participation estimates, license records, trail mapping, and spatial overlays to produce defensible, data-informed estimates of recreational use on STLs, even in the absence of direct site-level visitation tracking.

Process and Approach

OSTL and Navio employed a collaborative, multi-stage analytical process developed through close engagement with DNR and MNIT. Key steps included:

- **Project initiation and framing.** OSTL and Navio convened kickoff meetings with leadership and technical staff from DNR's Parks and Trails (PAT) and Fish and Wildlife (FAW) divisions to clarify legislative expectations, identify relevant data systems, and establish roles and responsibilities.
- **Framework development and consensus building.** For each recreational category, the team developed analytical frameworks aligned with statutory requirements. These frameworks defined data inputs, unit of analysis, spatial treatment, and estimation approaches. DNR divisions reviewed and validated these frameworks to ensure methodological soundness and operational feasibility.
- **Data assessment and refinement.** Subject matter experts from DNR's PAT and FAW divisions and MNIT's GIS specialists collaborated with OSTL and Navio to evaluate the availability, reliability, and

spatial accuracy of datasets. The team assessed survey instruments, license databases, participation estimates, trail system inventories, GIS layers, and administrative boundaries to determine how each could be applied to school trust lands.

- **Comparative qualitative research.** To contextualize Minnesota's approach, Navio and OSTL spoke with land managers overseeing school trust or similar fiduciary lands in other states. These conversations informed understanding of how other jurisdictions measure recreation and address fiduciary responsibilities.

This methodology, while tailored to the diverse data environments of each recreational activity, reflects a consistent emphasis on transparency, defensibility, and alignment with OSTL's fiduciary obligations to the Permanent School Fund's beneficiaries.

Notes on Project Approach: Reasonable Estimates and Key Analytical Concepts

The primary challenge in estimating the use of school trust lands (STLs) by individuals holding hunting licenses, fishing licenses, or licensed watercraft is that the Minnesota Department of Natural Resources (DNR) does not routinely track recreational activity on STLs or does so only in limited circumstances. Due to this lack of direct data, the study's analytical approach was developed in close collaboration with DNR subject matter experts to establish reasonable, evidence-based estimates.

Navio employed three analytical concepts to develop the estimates of recreational use across school trust lands:

- **Use of the most granular level of data:** Navio estimated recreational activity using the finest geographic resolution available for each recreation category. For instance, deer and bear hunting analyses were conducted at the Deer Permit Area (DPA) and Bear Management Unit (BMU) levels, respectively, while fishing and watercraft analyses were carried out by DNR administrative region. Using localized data enabled more accurate estimates that reflect regional differences in recreational activity and the distribution of school trust lands. These localized results were then aggregated to produce clear, consistent statewide estimates for comparison across all categories.

- **Use of proportional distribution in analyses:** Because precise user-location data is not available and no evidence indicates that school trust lands are more or less attractive to recreators than comparable land types, Navio used a proportional distribution approach to allocate recreational activity within relevant geographic areas. Under this method, recreation is assumed to occur evenly across all accessible lands of the same type within a defined zone (such as a Deer Permit Area or DNR administrative region). Recreational use on STLs within that zone was therefore estimated to be proportional to the share of STLs relative to the total area of interest (for example, accessible public hunting acreage or public water access sites). This approach provides a consistent, data-informed method for estimating recreational use based on the best available spatial information.

- **Rounding of estimates:** Some figures in this study (such as specific trail mileages) are presented without rounding when precision is necessary for clarity or comparison. However, most results are rounded to reflect that they are estimates derived from multiple data sources and analytical assumptions. Rounding supports clear communication while appropriately conveying the inherent uncertainty in modeled or survey-based data.

Overall Findings

School trust lands constitute roughly 5% of Minnesota's total land area, and overall recreational use on these lands generally reflects that proportion. The study estimates that hundreds of thousands of recreationalists use STLs each year for activities such as hunting, fishing, boating, camping, and trail-based recreation. Although STLs account for a relatively small share of statewide recreation, their regional significance is substantial, particularly in northern Minnesota. These lands offer essential access to high-quality natural areas and support a diverse set of outdoor activities that are integral to Minnesota's cultural heritage and economic vitality.

Taken together, these findings provide important context for understanding how recreational use is distributed across the state and how school trust lands contribute to that overall pattern. The sections below summarize results for each major recreation category.

Hunting

Minnesota hunters spent an estimated 6.6 million days hunting each year from 2020–2024. Of these, approximately 265,000 hunting days occurred on school trust lands, representing 4.0% of all days hunted statewide. Results by species category include:

- **White-tailed deer:** 141,000 days on STLs (3.5% of 4.0 million days).
- **Eastern wild turkey:** 16,000 days on STLs (4.9% of 327,000 days).
- **Black bear:** 5,900 days on STLs (10.3% of 57,200 days).
- **Small game:** 102,000 days on STLs (4.7% of 2.2 million days).

Fishing

Licensed anglers spent approximately 25 million days fishing per year. Of all fishing days that involved the use of a public water access site (PWA), an estimated 284,000 fishing days occurred at PWAs located on STLs. This represents 1.1% of annual fishing days involving PWA use.

Watercraft Recreation

Minnesota-licensed watercraft made approximately 3.8 million annual visits to public water access sites. Of these, an estimated 168,000 launches (or 4.4%) occurred at PWAs located on STLs.

Trails

School trust lands support meaningful mileage within two major statewide trail systems:

- **ATV trails:** 371 miles on STLs (9.4% of the state's 3,930 miles).
- **Snowmobile trails:** 847 miles on STLs (3.7% of 23,094 miles statewide).

State Parks and Recreation Areas

A GIS analysis identified approximately 850 acres of school trust lands located within state parks and state recreation areas. This accounts for 0.4% of the statewide total of 236,000 acres managed for these purposes.

Other Permitted or Fee-Based Recreation

- **State forest campgrounds:** 27 of 54 state forest campgrounds are located on STLs.
    - 100% of camping fees collected at these sites are deposited into the Permanent School Fund (PSF).
- **Horseback riding trails:** 4 miles of trails on STLs (0.3% of 1,211 miles statewide).
    - 0% of horseback riding permit fees are deposited into the PSF.
- **Cross-country skiing trails:** 31 miles of trails on STLs (5.7% of 552 miles statewide).
    - 0% of cross-country ski pass revenue is deposited into the PSF.

Signage

The projected one-time cost to design and install STL entrance signage at 474 identified locations is $155,000. Beginning in year two, recurring annual costs for sign replacement and maintenance are estimated at $11,000, increasing with inflation.

Maps

Updating printed maps to label school trust lands at relevant parks, recreation areas, forests, and trails is estimated to cost $316,000. Updating the digital *Recreation Compass* to include STL boundaries is estimated at $5,040.

Hunting

LEGISLATIVE REQUIREMENT

Determine the estimated annual number of daily visits by individuals with a Minnesota hunting license accessing school trust lands and as a percentage of annual days hunted by all individuals with a Minnesota hunting license.

Minnesota's varied landscapes and abundant wildlife have long made it a premier hunting destination for both residents and nonresidents. Across all species analyzed, Navio estimated that hunters made an average of approximately 265,000 annual visits to school trust lands between 2020 and 2024. This total includes about 141,000 deer hunting visits, 16,000 turkey hunting visits, 5,900 bear hunting visits, and 102,000 small game hunting visits. Combined, these activities represent roughly 4% of all hunting days that occur statewide each year.

Overall, these results indicate that school trust lands play a meaningful, though regionally variable, role in supporting hunting across Minnesota. The relatively modest statewide share of hunting activity occurring on STLs reflects both the geographic distribution of trust lands and the concentration of hunting on private lands or in areas with fewer STL parcels. Despite these regional differences, the estimated 265,000 annual hunting visits highlight the continued importance of STLs as a core component of Minnesota's public hunting landscape.

Species Analyzed

Navio collaborated with DNR's Fish & Wildlife Division and OSTL to identify the species most hunted on school trust lands and selected four categories for detailed analysis:

- **White-Tailed Deer** (Page 12).
- **Eastern Wild Turkey** (Page 15).
- **Black Bear** (Page 17).
- **Small Game** (Page 19).

The multiple small game species were combined into a single category and analysis based on similarities in hunting practices and the limited availability of species-specific data. Navio excluded two species from quantitative analyses:

- **Elk:** DNR issues a very limited number of elk hunting permits each year through a lottery system. In 2024, for example, only 10 permits were issued.
- **Moose:** Minnesota has not held a public moose hunt since 2012, when the state suspended the season due to conservation concerns following a sharp population decline between 2009 and 2012.

Land Cover Analysis to Determine Accessible Habitats for Hunting

To identify school trust land parcels that are both open and suitable for hunting the species included in this study, Minnesota IT Services (MNIT) supplied spatial datasets used to conduct a land cover and accessibility analysis. This analysis quantified the acreage of public lands (including school trust lands) that are (1) legally open to hunting and (2) considered accessible for hunting activities. For the purposes of this study, "accessible" refers to lands where hunters are most likely to concentrate their efforts, based on the distribution of species within suitable habitat types and the relative ease of human movement through those environments.

The resulting accessibility classifications served as the basis for estimating proportional distributions of hunting activity on STLs. The land cover types evaluated and their accessibility determinations by species are defined[1] below:

- **Upland habitats** are characterized by well-drained soils and include land cover types ranging from hardwood forests to upland prairies and savannas. Upland habitats were considered accessible for hunting for all species analyzed, including white-tailed deer, eastern wild turkey, black bear, and small game species.

- **Accessible lowland habitats** consist of grass-dominated, largely treeless communities on poorly drained but physically accessible soils. Land cover in this category was considered accessible for hunting for all species.

- **Deep marsh habitats** are shallow-basin wetlands dominated by emergent vegetation such as cattails and bulrushes. Due to limited road and trail access, deep marsh habitats were excluded from the white-tailed deer, eastern wild turkey, and black bear analyses, as they are effectively inaccessible for these hunters. However, because waterfowl hunters commonly use deep marsh environments, these areas were considered accessible for small game hunting.

[1] Definitions sourced from Minnesota DNR: https://www.dnr.state.mn.us/rsg/habitat.html.

- **Bog and peatland habitats** are lowland forested systems on peat soils, characterized by vegetation adapted to permanently saturated conditions. Because these habitats generally lack road and trail access and are effectively inaccessible, they were not considered accessible for hunting for any species.

Table 1 shows the results of the analysis identifying public lands in Minnesota that are both legally open and physically accessible for hunting. These lands include county, state, and federal properties, as well as select private lands enrolled in public access programs such as Walk-In Access.[2] As noted earlier, deep marsh habitats were considered accessible for small game hunters. However, because only approximately 23,000 acres of deep marsh occur within public lands open to small game hunting, their inclusion does not materially affect the totals shown in Table 1 and is not visible due to rounding.

Table 1: Results of GIS analysis to determine legal and accessible land for hunting, by species. All values expressed in millions of acres.

	Deer	Turkey	Black bear	Small game
Public land that is legal for hunting	12.0	11.7	11.0	11.5
Public land that is legal and accessible	9.2	8.9	8.2	8.8
STL that is legal and accessible	1.4	1.4	1.4	1.4

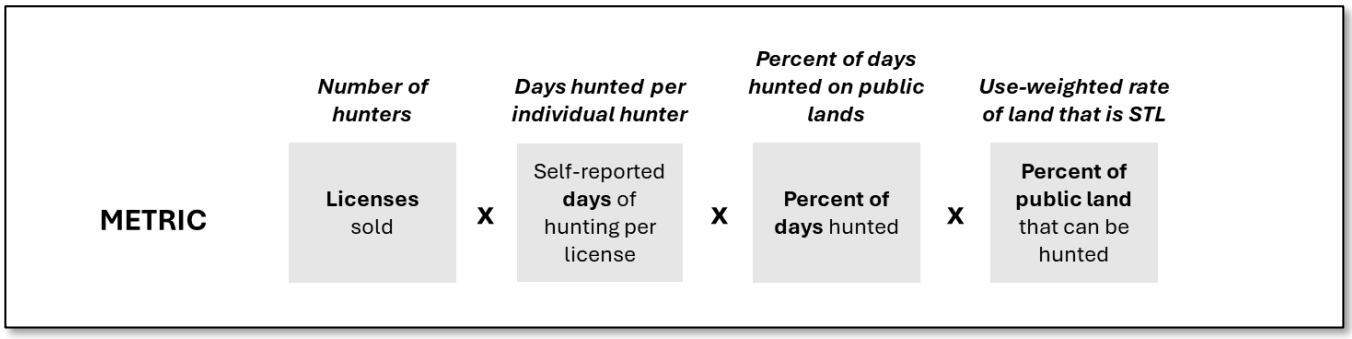
Overall Hunting Methodology

Navio developed a standardized, four-step analytical framework to estimate the number of annual hunting visits to school trust lands between 2020 and 2024 (see Figure 2 on page 12). The approach combined DNR license and survey data with GIS-based land accessibility analysis to produce reasonable, data-driven estimates of use by species.

- **Number of hunters:** Using DNR License Center Data, Navio estimated the number of hunters, excluding non-hunting licenses (e.g., bonus tags[3] or special hunts[4]).
- **Days hunted per individual hunter:** Average days hunted were derived from DNR hunter surveys for each species. This data captured the typical time hunters spent in the field during a given season.
- **Percent of days hunted on public lands***:* Hunter survey data and DNR subject matter expert (SME) input were used to estimate the proportion of hunting that occurred on public versus private lands.
- **Use-weighted rate of school trust lands***:* To account for the uneven distribution of STLs and hunting activity across the state, Navio calculated a statewide rate using the most detailed available geographic data (e.g., Deer Permit Areas or Bear Management Units) to account for the spatial relationship between hunter concentration and accessible STLs.

[2] The Walk-In Access Program allows public access to private lands that are enrolled in the program for hunting and other compatible uses such as birdwatching and nature photography.
[3] A "bonus tag" is an additional permit available to hunters who hold a valid regular deer license that allows them to harvest an extra antlerless deer in certain deer-permit areas, beyond what their base license would allow.
[4] "Special hunts" are authorized hunting opportunities in particular areas or under specific conditions that differ from regular statewide seasons. They can include hunts in specific locations (such as state parks) or times when hunting is otherwise limited.

Figure 2: Overall hunting methodology framework



This approach produced the use-weighted rate, which is essential because hunting activity is unevenly distributed across Minnesota. For example, some regions sell a high number of hunting licenses but contain relatively little accessible school trust lands. Relying on a simple statewide average of STL acreage would therefore misrepresent actual use in certain areas. The use-weighted rate adjusts for these regional differences, resulting in a more accurate and representative estimate of hunting activity on STLs.

White-Tailed Deer Hunting

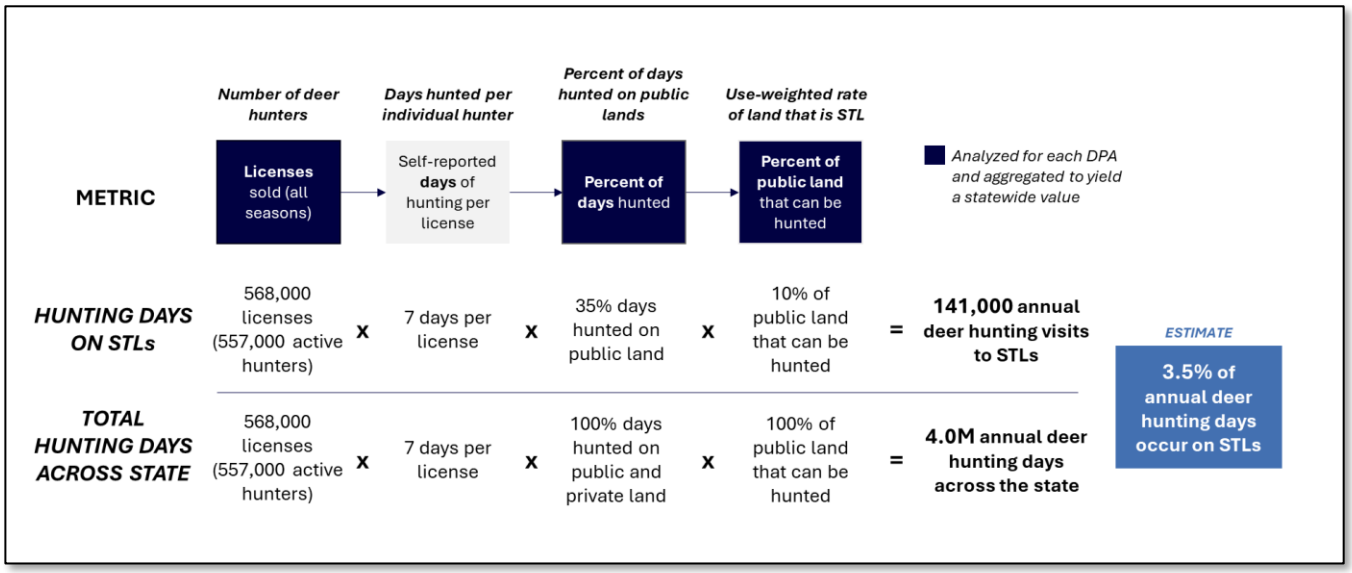
Minnesota's white-tailed deer population is well established across the state, thriving in a wide range of habitats including forests, agricultural regions, and even urban areas. The Minnesota Department of Natural Resources (DNR) manages the state's deer herd primarily through regulated hunting. White-tailed deer are the most frequently hunted species in Minnesota, representing a central component of the state's hunting tradition.

Methodology

Navio applied the overall hunting methodology to estimate the number of days hunters used school trust lands to hunt white-tailed deer (see Figure 2). Data from DNR's License Center was used to determine the total number of licensed deer hunters in Minnesota. In addition, three DNR surveys provided essential data inputs: the 2021 Deer Season Survey, its 2024 update[5], and the Minnesota Deer Population Goal Setting Surveys (see Figure 3 on page 13). Geographic Information System (GIS) analysis conducted by Minnesota IT Services (MNIT) was used to identify areas where deer hunting is legally permitted and to estimate where hunters are most likely to concentrate their activity.

[5] Lovelace, S., Landon, A.C., & Keller, B. (2025). Survey of Deer Hunters – 2024 Season. Minnesota Department of Natural Resources.

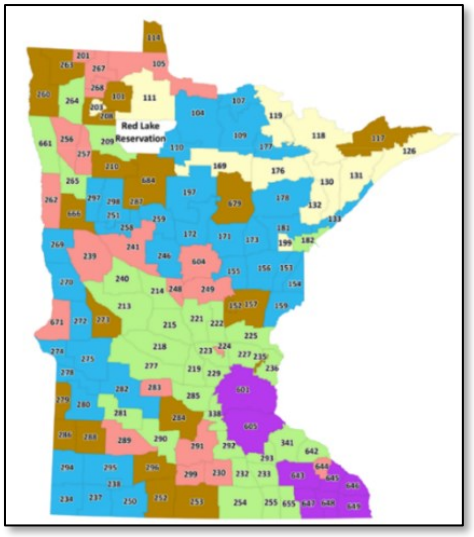
Figure 3: Methodology to estimate percent of visits to STLs for deer hunting



Deer Permit Areas

Minnesota's 130 Deer Permit Areas (DPAs) are designated management zones used by the DNR to monitor and regulate deer populations (see Figure 4). Each DPA has distinct boundaries, typically following natural or man-made features such as rivers and roads and may have different harvest limits during a given season. By grouping areas with similar habitat types, land uses, hunter distribution, and deer populations, DPAs enable more precise management and data collection. Because DPA-level data represents the most detailed scale at which the DNR tracks deer hunting activity, Navio conducted its analysis at this level. For clarity, the results from all DPAs were aggregated and are presented in this section as statewide averages, except where otherwise noted.

Figure 4: Map of Deer Permit Areas



Analysis

Number of Deer Hunters

According to data from the DNR License Center, deer hunting license sales averaged approximately 568,000 per year between 2020 and 2024. This total includes licenses for firearm, muzzleloader, and archery seasons, as well as youth and metro management licenses. "Bonus tags" were excluded from the analysis because they do not represent additional hunters in the field. Licenses issued for special hunts were also excluded, as they accounted for less than 1% of total sales during the study period.

Days Hunted per Individual Hunter

According to DNR's 2024 Deer Hunter Survey[6], firearm hunters spent an average of 5.6 days and muzzleloader hunters 6.4 days in the field during the 2024 season. The most recent data available for

[6] Lovelace, S., Landon, A.C., & Keller, B. (2025). Survey of deer hunters – 2024 season. Minnesota Department of Natural Resources. Saint Paul, MN. The 2021 Deer Hunter Survey is the most recent survey published on DNR's website.

archery hunters, from DNR's 2021 survey, indicated an average of 15.2 days spent hunting. Combined, these results equate to an average of approximately seven days of hunting per license holder across all license types. The 2024 survey also indicated that only 2% of individuals who purchased licenses did not hunt during the 2024–2025 season. Navio multiplied the average seven days hunted by 98% of the 568,000 licenses sold annually between 2020 and 2024, resulting in an estimated 4.0 million total deer hunting days per year during that period.

Percent of Days Hunted on Public Lands

DNR's Deer Population Goal Setting Surveys conducted between 2020 and 2022 asked hunters to estimate how often they hunted deer on public lands. Navio used these responses to calculate the proportion of hunting activity occurring on public lands within each DPA. Hunter estimates varied widely, ranging from less than 20% to more than 80% of total hunting days taking place on public lands, depending on the DPA.

By multiplying each DPA's proportion of public land hunting days by its total estimated hunting days, Navio estimated the number of days hunters spent on public lands annually in each DPA. Summing the DPA-level results statewide indicated that, on average between 2020 and 2024, hunters spent 65% of their deer hunting days on private lands and 35% on public lands each year.

Use-Weighted Rate of School Trust Lands

Hunters can legally pursue deer on nearly 12 million acres of public land across Minnesota. Of this total, approximately 9.2 million acres are considered accessible to deer hunters, including 1.4 million acres of school trust lands (STLs). While STLs make up roughly 15% of the total accessible public hunting acreage, this statewide proportion does not accurately represent where hunting activity occurs, as hunting efforts are not evenly distributed across the state.

Deer hunting activity is primarily concentrated in Deer Permit Areas (DPAs) that contain relatively little accessible STL acreage. To account for this imbalance, Navio applied the use-weighted rate method (described on page 11), which multiplies each DPA's percentage of accessible STL acreage by its relative share of statewide deer license sales. This approach produced a statewide estimate that approximately 10% of public land deer hunting occurs on school trust lands.

Results

Using the four inputs and data sources described above (DNR's License Center records, deer hunter surveys, harvest goal-setting surveys, and MNIT's GIS analysis) Navio estimated that deer hunters made approximately 141,000 annual visits to school trust lands out of an estimated 4.0 million total deer hunting days statewide between 2020 and 2024 (see Table 2 on page 15). This represents about 3.5% of all annual deer hunting activity in Minnesota.

Two primary factors contributed to this result: first, only about 35% of deer hunting occurs on public lands (with the remainder on private property); and second, many of Minnesota's most heavily hunted areas contain relatively little accessible STL acreage, lowering the overall proportion of hunting activity occurring on STLs.

Table 2: Results of deer hunting analysis

Year	2020	2021	2022	2023	2024	Average
Total licenses	590,000	575,000	564,000	556,000	554,000	**568,000**
Total days hunted	4,000,000	3,900,000	3,900,000	4,100,000	4,100,000	**4,000,000**
Days hunted on public lands	1,400,000	1,400,000	1,400,000	1,500,000	1,500,000	**1,400,000**
Days hunted on STLs	146,000	141,000	138,000	141,000	139,000	**141,000**
% of days hunted on STLs	**3.7%**	**3.6%**	**3.6%**	**3.5%**	**3.5%**	**3.5%**

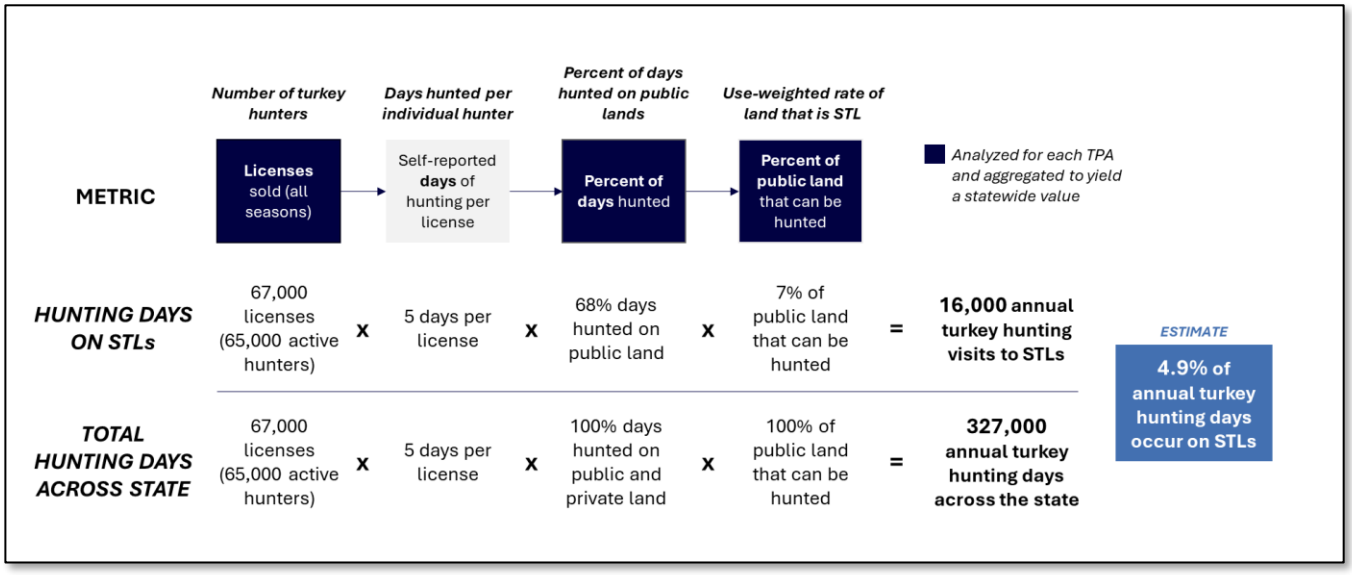
Eastern Wild Turkey Hunting

Minnesota's wild turkey population is a notable wildlife management success story. Once nearly extirpated by the late 1800s due to habitat loss and unregulated hunting, the eastern wild turkey was successfully reintroduced beginning in the 1970s. Today, wild turkeys are well established across much of Minnesota, thriving in landscapes that combine forests, farmland, and pastures, and are increasingly common in suburban and even urban areas.

Methodology

Navio used the overall hunting methodology (see Figure 2 on page 12) to estimate annual turkey hunting activity on school trust lands. Two DNR datasets provided key inputs: annual turkey harvest reports, which include license sales data, and its recent survey of turkey hunters[7] (see Figure 5). MNIT's Geographic Information System (GIS) land analysis was used to determine where hunters are legally allowed and most likely to hunt turkeys across the state.

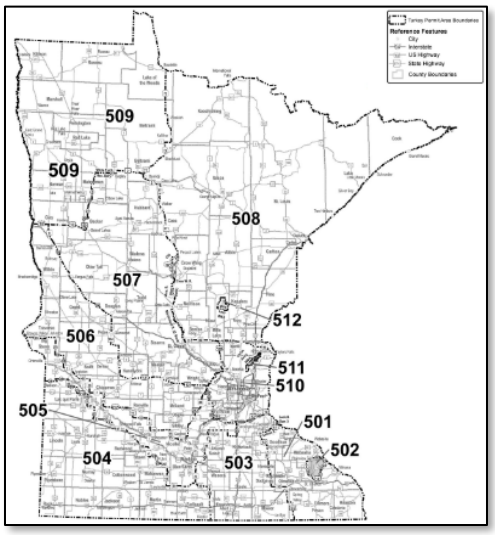
Figure 5: Methodology to estimate annual percent of visits to STLs for turkey hunting



[7] Lovelace, S., Landon, A.C., & Huck, N. (2025). Survey of turkey hunters – 2024-2025 season. Minnesota Department of Natural Resources. Saint Paul, MN.

The Minnesota DNR divides the state into 12 geographic zones known as Turkey Permit Areas (TPAs) (see Figure 6). TPAs are the most detailed level at which DNR collects and reports turkey hunting data, and Navio analyzed each TPA individually. For clarity, the results of these analyses were aggregated and are presented in this section as statewide averages.

Figure 6: Map of Turkey Permit Areas



Analysis

Number of Turkey Hunters

Unlike other game species, the DNR administers two turkey hunting seasons each year (spring and fall) and hunters must purchase a separate license for each. Except for two TPAs that use a lottery system for the spring season, there are no limits on license sales. According to annual harvest reports, Minnesota sold an average of 67,000 turkey hunting licenses per year between 2020 and 2024.

Days Hunted per Individual Hunter

DNR surveyed 7,000 licensed turkey hunters about their experiences during the fall 2024 and spring 2025 seasons. Results showed that only 3% of license holders did not hunt, and this proportion was applied across all study years. Fall turkey hunters, whose licenses reflect both firearm and archery use, spent an average of 4.3 days in the field. Spring firearm hunters averaged 4.0 days, while spring archery hunters spent 6.4 days hunting. Based on input from DNR subject matter experts, the 6.4-day estimate was also applied to youth permit holders, who were not surveyed. Applying these values to 2020–2024 license sales data, Navio estimated that turkey hunters spent an average of 327,000 days hunting statewide each year.

Percent of Days Hunted on Public Lands

During the 2024–2025 seasons, turkey hunters reported spending 68% of their time hunting on public lands. DNR subject matter experts indicated this proportion is likely consistent over time, as hunters tend to return to the same areas each year. Navio applied this percentage to each year's statewide hunting-day estimates and calculated that turkey hunters spent approximately 240,000 days hunting on public lands annually.

Use-Weighted Rate of School Trust Lands

Hunters can legally hunt turkeys on approximately 11.7 million acres of public land statewide. After excluding bog and deep marsh acreage, 9.2 million acres remain accessible to turkey hunters, including 1.4 million acres of school trust lands. While STLs make up about 15% of this total accessible acreage, hunting activity is not evenly distributed across the state. Much of it occurs in Turkey Permit Areas (TPAs) with relatively little accessible STL acreage. To account for this, Navio applied the use-weighted rate method (see page 11), which multiplies each TPA's share of STL acreage by its concentration of license sales. This analysis produced a statewide estimate that 7% of public turkey hunting occurs on school trust lands.

Results

Using inputs and estimates from harvest reports, the turkey hunter survey, and GIS analysis, Navio estimated that turkey hunters made approximately 16,000 annual hunting visits to school trust lands out of a total of 327,000 annual turkey hunting days between 2020 and 2024 (see Table 3 on page 17). This

represents about 4.9% of all annual turkey hunting days in Minnesota. The result reflects the high concentration of hunting activity in TPAs with limited or no STL acreage. For example, TPAs 507 and 508 accounted for roughly 31,000 hunters and 15,000 of the days hunted on STLs, while the remaining 36,000 hunters in all other TPAs collectively spent only about 1,600 days on school trust lands.

Table 3: Results of turkey hunting analysis

Year	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Average
Total permits sold	66,000	64,000	63,000	69,000	72,000	**67,000**
Total days hunted	323,000	311,000	306,000	342,000	353,000	**327,000**
Days hunted on public lands	220,000	211,000	208,000	232,000	240,000	**222,000**
Days hunted on STLs	16,000	15,000	15,000	17,000	18,000	**16,000**
% of days hunted on STLs	**4.9%**	**4.9%**	**4.8%**	**5.0%**	**5.1%**	**4.9%**

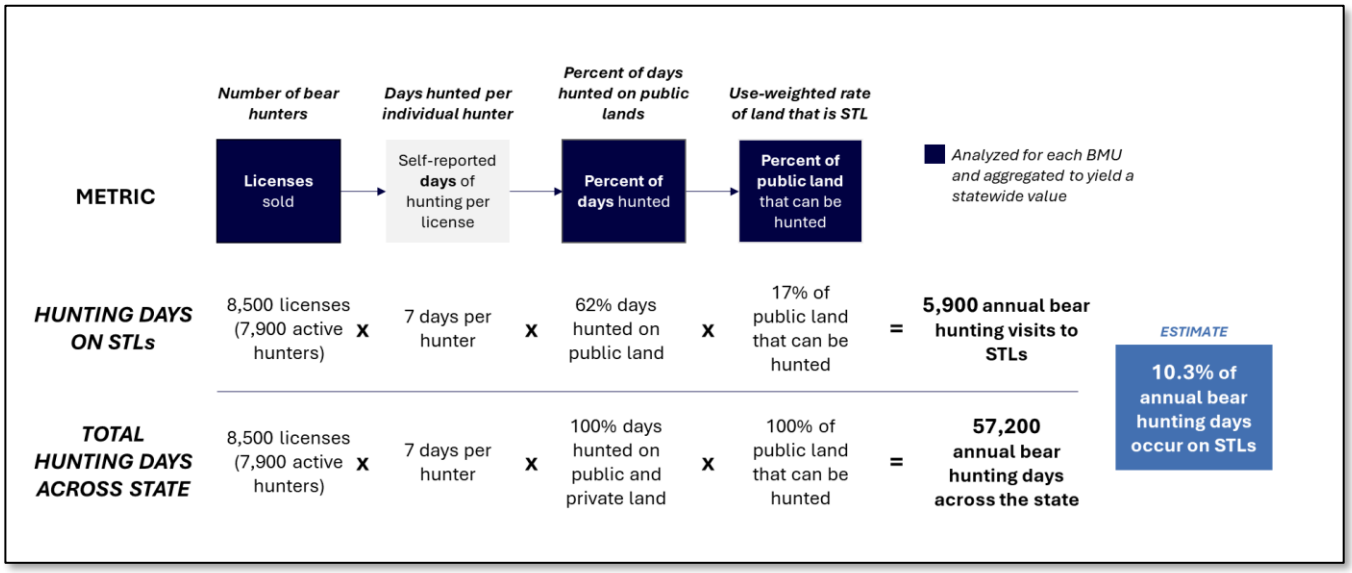
Black Bear Hunting

Minnesota supports a sustainable population of American black bears across its northern and central forest regions, with sightings becoming increasingly common in suburban areas. These secretive omnivores primarily inhabit forests and swamps but also forage in clearings and agricultural landscapes. The black bear is the only bear species found in Minnesota.

Methodology

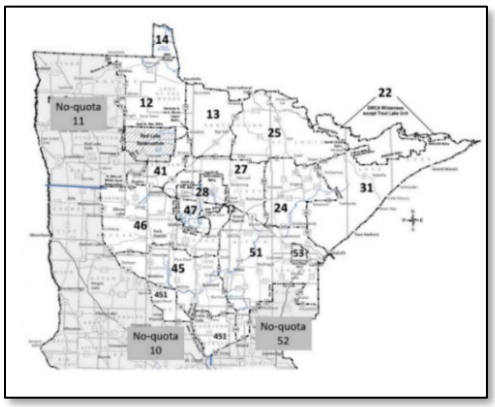
Navio used the overall hunting methodology (see Figure 2 on page 12) to estimate the number of days hunters visited school trust lands to hunt black bears (see Figure 7). Data from DNR's License Center was used to determine the number of bear hunters statewide, and two DNR bear hunting–related surveys provided key supporting information. MNIT's Geographic Information System (GIS) land analysis was used to identify areas where hunters were legally permitted and most likely to hunt.

Figure 7: Methodology to estimate visits to STLs for bear hunting



Minnesota DNR divides the state into 19 geographic areas known as Bear Management Units (BMUs), which regulate the number of licenses issued to individual bear hunters (see Figure 8). BMUs represent the most detailed level at which DNR collects and reports data on bear hunting, and Navio analyzed each unit separately. These results were combined and are presented in this section as statewide averages.

Figure 8: Map of Bear Management Units



Analysis

Number of Bear Hunters

The state limits the number of licenses sold in 16 of the 19 BMUs, where bear populations are highest. License sales are unlimited in the remaining three "no-quota" areas. According to the DNR License Center, an average of 8,500 bear hunting licenses were sold annually across all BMUs between 2020 and 2024.

Days Hunted per Individual Hunter

The 2022 bear hunter survey provided the most recent data to estimate bear hunting days in Minnesota. The survey found that slightly more than 7% of license holders did not hunt during the 2022 season. Because this is the only available measure of non-participation, that rate was applied to all four years of analysis. Hunters reported spending slightly more than seven days in the field, a figure DNR subject matter experts consider consistent across years due to the habitual nature of bear hunting. Applying these estimates, Navio calculated that 7,900 active hunters spent an average of 57,200 days hunting bears across all BMUs annually between 2020–2024.

Percent of Days Hunted on Public Lands

In a 2009 DNR survey,[8] bear hunters reported spending 62% of their hunting time on public lands. Although nearly two decades old, DNR subject matter experts confirmed this data is similarly proportioned to earlier surveys (60% in 2001 and 64% in 1998). Based on this validation, Navio applied the 62% rate to the 2020–2024 period, and estimated that hunters spent an average of 35,500 days each year hunting bears on public lands.

Use-Weighted Rate School Trust Lands

Hunters can legally hunt bears on approximately 11 million acres of public land statewide. Although bears inhabit bog habitats, 2.8 million acres of bog were excluded from analysis because they are inaccessible to hunters. After also excluding 17,000 acres of deep marsh, the total public land accessible to bear hunters is 8.2 million acres. School trust lands account for 1.4 million of those acres, or about 17% of the total. To account for the uneven distribution of both hunter activity and STL acreage across the state, Navio applied the use-weighted rate method (described on page 11). This approach multiplies each BMU's share of STL acreage by its relative concentration of bear license sales, resulting in a statewide estimate that approximately 17% of public bear hunting occurs on school trust lands.

Results

Using inputs and estimates from the DNR License Center, bear hunter surveys, and GIS analysis, Navio estimates that bear hunters made approximately 5,900 annual visits to STLs between 2020 and 2024 (see Table 4 on page 19). This represents about 10.3% of the 57,200 total annual bear hunting days statewide.

[8] Fulton, D., L. Cornicelli, and D. Garshelis. (2009). 2009 Minnesota Bear Hunter Survey. Minnesota Cooperative Fish and Wildlife Unit and Minnesota Department of Natural Resources. Not available online.

The comparatively higher proportion of bear hunting on STLs reflects the strong geographic overlap between black bear habitat and areas of the state with high concentrations of school trust lands.

Table 4: Results of bear hunting analysis

Year	2020	2021	2022	2023	2024	Average
Total permits sold	8,800	8,900	8,100	8,100	8,500	**8,500**
Total days hunted	59,300	60,200	54,300	54,500	57,600	**57,200**
Days hunted on public lands	36,800	37,300	33,700	33,800	35,700	**35,500**
Total days hunted on STLs	6,200	6,200	5,600	5,600	5,900	**5,900**
% days hunted on STLs	**10.5%**	**10.3%**	**10.3%**	**10.3%**	**10.2%**	**10.3%**

Small Game Hunting

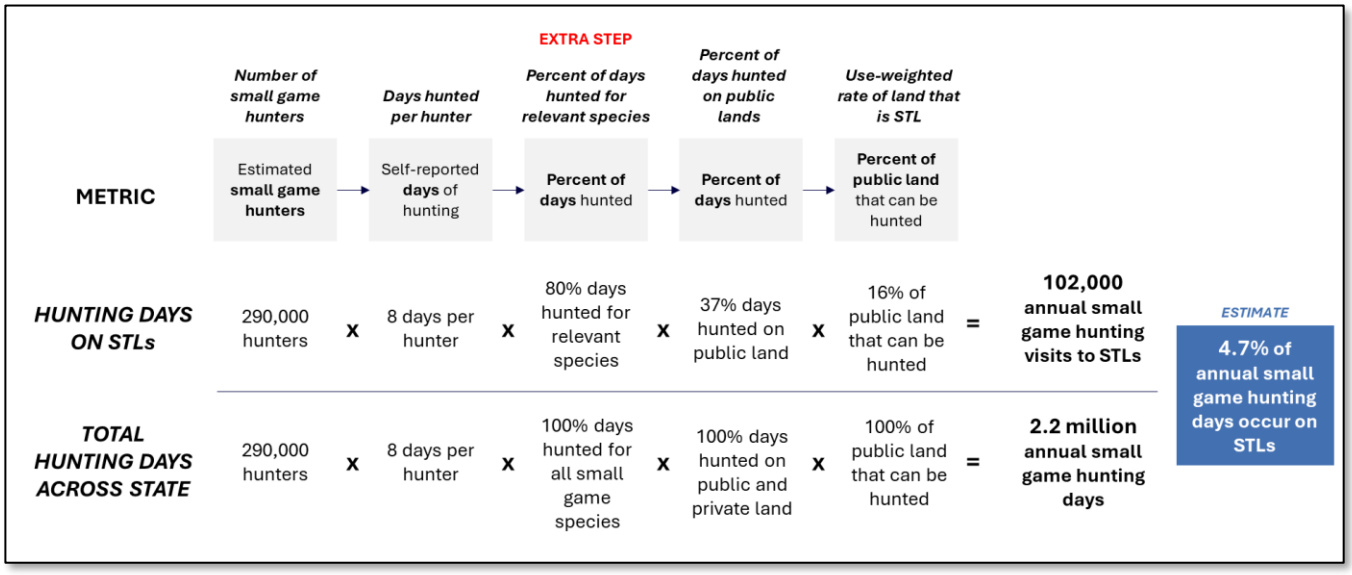
Minnesota offers a wide variety of small game hunting opportunities across its diverse landscapes, from northern forests to southern prairies. Small game species including grouse, waterfowl, rabbits, and squirrels are broadly distributed and provide accessible hunting experiences throughout the state.

To establish a consistent basis for evaluating small game hunting activity, Navio adopted the Minnesota DNR's definition of small game species. The 24 species included in DNR's annual Small Game Hunter Mail Survey (small game survey) served as the core dataset for this analysis, further supported by MNIT's Geographic Information System (GIS) land analysis.

Methodology

Navio used the overall hunting methodology (see Figure 2 on page 12) as the foundation for this analysis. Small game differs slightly from the other hunting categories because it requires a multiple-species rather than a single-species approach. For this study, the number of hunting days for each species was calculated individually; however, results are presented in aggregate rather than at the species level, except where otherwise noted. The small game–specific methodology is shown in Figure 9.

Figure 9: Methodology to estimate visits to STLs for small game hunting



Unlike Deer Permit Areas or Bear Management Units, the small game survey reports data only at the statewide level, which is the most detailed level available. To estimate the number of small game hunting days occurring on school trust lands (STLs), DNR subject matter experts identified the species whose natural ranges overlap with areas containing STLs. This assessment found that 20 of the 24 species included in the small game survey occur on STLs. These are referred to as "relevant" small game species for this analysis. The four species that do not occur on STLs were excluded before estimating hunting days on public lands and on STLs specifically. Notably, the ring-necked pheasant was excluded because its natural range largely does not overlap with school trust land areas, even though it accounts for approximately 16% of total small game hunting days statewide.

Analysis

Number of Small Game Hunters

Since a small game license permits hunting for multiple species, license records alone could not provide species-level visit estimates. Navio instead relied on the small game survey's estimated number of hunters for each species to construct a five-year average. Although this method does not capture instances when hunters pursue more than one species during a single outing, DNR subject matter experts advised that such overlap represents only a minor share of overall hunting activity.

Between 2020 and 2024, approximately 240,000 individuals purchased small game or waterfowl licenses each year. Because many hunters pursued more than one species, the small game survey estimated a total of about 290,000 hunting participations across all 24 species. This indicates that the average license holder hunted slightly more than one distinct species, resulting in an estimated annual average of 290,000 small game hunters during the study period. Nearly half of all hunting activity focused on just three species: ruffed grouse (22%), duck (17%), and Canada goose (11%).

Days Hunted per Hunter

Self-reported data from the small game survey indicated that hunters spent an average of eight days per year hunting small game statewide between 2020 and 2024.

Percent of Days Hunted for Relevant Small Game Species

Statewide, small game hunters spent an average of approximately eight days afield each year, inclusive of all species within the small game category. Based on a five-year average from the small game survey, the 20 "relevant" species occurring on STLs accounted for about 80% of total days hunted in Minnesota. Table 5 summarizes the estimated number of days hunted for both relevant and non-relevant species. Overall, hunters spent roughly 2.2 million days hunting small game annually, with about 1.7 million of those days devoted to relevant species.

Table 5: Days hunted for small game species found on STLs (average from 2020-2024)

	All small game species	**Small game not found on STLs** (4 species)	**Small game found on STLs** (20 species)
Total small game hunters	290,000	65,000	225,000
Average days hunted per year	7.5	6.6	7.7
Total days hunted per year	**2,200,000**	**500,000**	**1,700,000**

Percent of Days Hunted on Public Lands

Unlike the deer and bear hunter surveys, DNR's small game survey did not ask hunters to estimate the share of their hunting that occurred on private versus public land. In the absence of this information, Navio worked with DNR subject matter experts to develop an estimate that approximately 37% of small game hunting occurs on public land each year. This estimate was derived by calculating a weighted public-hunting rate for each of the 20 relevant species and combining those rates with the estimated days hunted for each species. Using this method, the analysis produced an annual average of roughly 640,000 small game hunting days on public lands between 2020 and 2024, representing approximately 37% of total days hunted. Navio applied this percentage to each year's total days hunted for relevant small game species.

Use-Weighted Rate of School Trust Lands

Public land where hunters can legally pursue small game totals nearly 11.5 million acres statewide. Of these, 8.8 million acres are accessible to small game hunters, including 1.4 million acres of school trust lands, or approximately 16% of all accessible public land. Unlike the other hunting analyses, the small game land analysis included deep marsh habitats to account for waterfowl hunting. Additionally, because small game data was only available at a statewide level (rather than by permit area), Navio applied a single statewide rate for accessible school trust lands. Multiplying the 640,000 public hunting days by the 16% STL proportion produced an estimated 102,000 annual visits to school trust lands for small game hunting.

Results

Using five key inputs and estimates from the small game survey, DNR expert knowledge, and GIS analyses, Navio calculated that small game hunters made approximately 100,000 annual visits to school trust lands out of a total of 2.2 million small game hunting days statewide (see Table 6). This represents about 4.7% of all annual small game hunting days.

Table 6: Results of small game hunting analysis

Year	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	Average
Total hunters	312,000	291,000	276,000	289,000	297,000	**290,000**
Total days hunted	2,200,000	2,200,000	1,900,000	2,100,000	2,500,000	**2,200,000**
Days hunted for species that occur on STLs	1,800,000	1,800,000	1,500,000	1,700,000	2,000,000	**1,700,000**
Days hunted on public lands	670,000	650,000	560,000	620,000	740,000	**650,000**
Days hunted on STLs	105,000	103,000	88,000	98,000	118,000	**102,000**
% of days hunted on STLs	**4.7%**	**4.7%**	**4.7%**	**4.7%**	**4.7%**	**4.7%**

Fishing

LEGISLATIVE REQUIREMENT

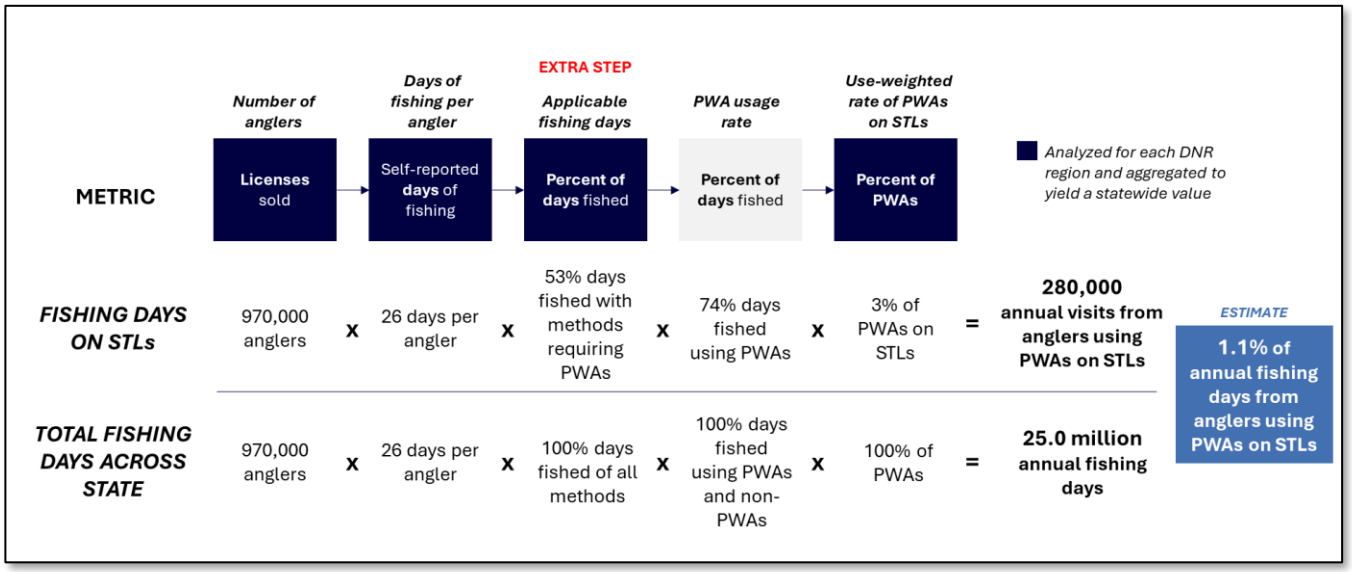
Determine the estimated annual number of daily visits by individuals with a Minnesota fishing license using a public water access site that contains school trust lands and as a percentage of annual days fishing by all individuals with a Minnesota fishing license.

Minnesota offers extensive fishing opportunities across its lakes, rivers, and streams, supporting one of the most active angling populations in the country. The state's diverse aquatic ecosystems provide year-round angling through both open-water and ice-fishing seasons.

Methodology

Navio relied on several data sources to address the legislative requirement, including the 2022-2023 Statewide Angler Report[9] (angler report), the 2020 Recreational Boating Study (boating study), and 2020–2024 fishing license data and Geographic Information System (GIS) data from Minnesota IT Services (see Figure 10).

Figure 10: Methodology to estimate percent of fishing days that visit Public Water Access Sites on STLs



The methodology involves five steps:

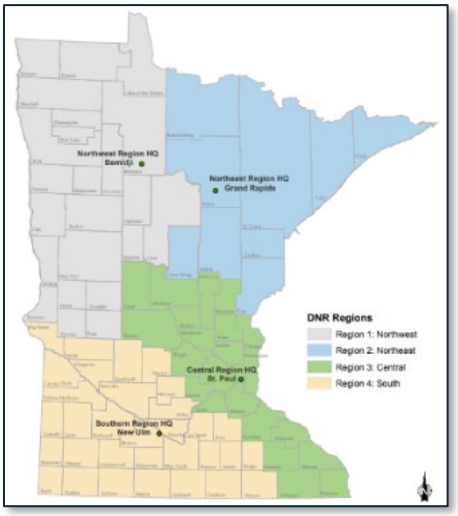
- **Number of anglers:** DNR provided license sales data to determine the annual number of fishing license holders.
- **Days of fishing per angler:** The average number of days each angler reported fishing per year was determined from data in the angler report.

[9] Lovelace, S. (2024). Fishing in Minnesota: A Study of Angler Participation and Activities in the 2022-23 Season. University of Minnesota, Minnesota Cooperative Fish and Wildlife Research Unit, Department of Fisheries, Wildlife, and Conservation Biology.

- **Applicable fishing days:** The total fishing days calculation was narrowed to only include fishing methods that might require a public water access site to get on the water, such as fishing from a boat. Days spent fishing from shore or on ice were excluded.
- **Public Water Access Site (PWA) usage rate:** Data from DNR's boating study allowed for a determination of how often anglers use public access sites versus private access (e.g., a privately-owned cabin or resort).
- **Use-weighted rate of PWAs on STLs:** A statewide rate using an approach that weights each DNR region's percentage of PWAs on STLs by its concentration of anglers. This methodology was calculated for each DNR region and aggregated to determine a statewide total. The approach accounted for regional differences in the number of PWAs, STL density and the geographic concentration of license holders.

Because precise angler location data was not available, the analysis assumed that use of PWAs for fishing was evenly distributed within each DNR administrative region. Under this assumption, the share of fishing visits occurring at PWAs on school trust lands was estimated to be proportional to the percentage of PWAs within each region that are located on STLs.

Figure 11: Map of DNR Regions



DNR Regions

DNR divides the state into four administrative regions: Northwest, Northeast, Central, and Southern (see Figure 11). The seven-county Twin Cities metropolitan area is often managed as a distinct sub-region within the Central Region due to its high population density and unique urban recreation demands. Although each region administers public lands and facilities within its boundaries, all operate under a unified mission and shared statewide goals.

Each DNR region is responsible for managing the PWAs located within its jurisdiction. Table 7 presents the distribution of PWAs across the state by DNR region, along with the number and percentage of those sites situated on school trust lands.

Table 7: Number of PWAs across the state and on STLs

DNR Region	Total PWAs	PWAs on STLs	% of PWAs on STLs
Northwest	793	47	5.9%
Northeast	1,018	143	14.0%
Central	445	3	0.7%
Southern	572	1	0.2%
7-County Metro	220	0	0.0%
Statewide Total	**3,048**	**194**	**6.4%**

Analysis

Number of anglers

According to the DNR License Center, the state sold an average of 970,000 fishing licenses each year between 2020 and 2024.

Days of fishing per angler
The angler report asked respondents to estimate the total number of days they fished during the 2022 season across the eight defined fishing methods listed below. Survey responses indicated that, statewide, the average angler spent approximately 26 days fishing per year using all methods combined.

Applicable fishing days
Four of the eight fishing methods documented in the angler report were excluded because they do not require use of a public water access site. These include fishing on lakes or rivers from a pier or shore, and ice fishing on rivers or lakes.

The report indicated that the four methods requiring the use of a PWA (fishing on lakes or rivers from a boat and bowfishing or spearfishing on lakes) accounted for 53% of all days fished. Navio applied this percentage uniformly to each year from 2020 through 2024.

PWA site usage rate
Data from the boating section of this study show that boaters use PWAs for approximately 74% of all watercraft launches. Because fishing is a primary activity associated with boating, this percentage was applied to the fishing analysis to estimate the share of fishing activity occurring through PWAs.

Use-weighted rate of PWAs on STLs
While 6.4% of all PWAs statewide are located on school trust lands, this figure does not account for how fishing activity is distributed geographically. Because precise trip-location data for anglers is not available, angler residence information from license records was used as a proxy for where anglers most often fish. This approach may overweight the seven-county metro area and DNR's Central region (both of which contain very few STLs) relative to northern lake regions that attract a disproportionate share of fishing effort. To maintain methodological consistency, the analysis applied the same regional distribution of anglers reported in the 2022 angler survey (see Table 8 on page 25).

Anglers are disproportionately concentrated in DNR regions with few or no PWAs on STLs. For example, the Central and seven-county metro regions account for roughly two-thirds of all license holders but contain less than 1% of the state's PWAs located on STLs (see Table 7 on page 23).

To reflect this uneven spatial distribution, Navio applied the use-weighted rate method (discussed on page 11), multiplying each region's share of PWAs on STLs by its proportion of statewide anglers. This analysis found that approximately 3% of all PWA-based fishing days occurred at a PWA on school trust lands, equivalent to an estimated 280,000 of the 9.8 million annual PWA-based fishing days.

Table 8: Average annual licenses sold and days fished by DNR region (2020-2024)

DNR Region	Proportion of license holders	Licenses sold	Total days fished	Total fishing days using PWAs	Total fishing days on STLs using PWAs	% of fishing days using PWAs on STLs
Northwest	12%	116,000	3,400,000	1,400,000	81,000	**2.4%**
Northeast	12%	112,000	3,100,000	1,300,000	182,000	**5.9%**
Central	21%	205,000	6,000,000	2,500,000	17,000	**0.3%**
Southern	14%	135,000	3,800,000	1,400,000	2,000	**0.1%**
7-County Metro	41%	402,000	8,700,000	3,200,000	-	**0.0%**
Statewide Total	**100%**	**970,000**	**25,000,000**	**9,800,000**	**280,000**	**1.1%**

Results

Between 2020 and 2024, anglers made an estimated 280,000 annual fishing visits to lakes accessed from PWAs located on STLs, representing slightly more than 1% of all statewide fishing days (see Table 9). This proportion is small primarily because relatively few PWAs are situated on STLs and because a large share of angling activity occurs in the Central and Twin Cities metro regions, where STLs are limited.

Table 9: Results of fishing analysis

Year	2020	2021	2022	2023	2024	Average
Total anglers	1,053,000	999,000	931,000	905,000	961,000	**970,000**
Total fishing days	27,200,000	25,800,000	24,000,000	23,300,000	24,800,000	**25,000,000**
Fishing days using applicable methods	14,400,000	13,700,000	12,700,000	12,400,000	13,100,000	**13,300,000**
Days fishing using PWAs	10,700,000	10,100,000	9,400,000	9,200,000	9,700,000	**9,800,000**
Days fishing using PWAs on STLs	309,000	293,000	273,000	265,000	282,000	**280,000**
% of days fishing on STLs	**1.1%**	**1.1%**	**1.1%**	**1.1%**	**1.1%**	**1.1%**

The results indicate that school trust lands play a modest but measurable role in supporting fishing access across Minnesota. Even so, the findings show that STLs contribute meaningfully to public fishing access, particularly in northern regions of the state where both STLs and water access sites are more prevalent.

Watercraft

LEGISLATIVE REQUIREMENT

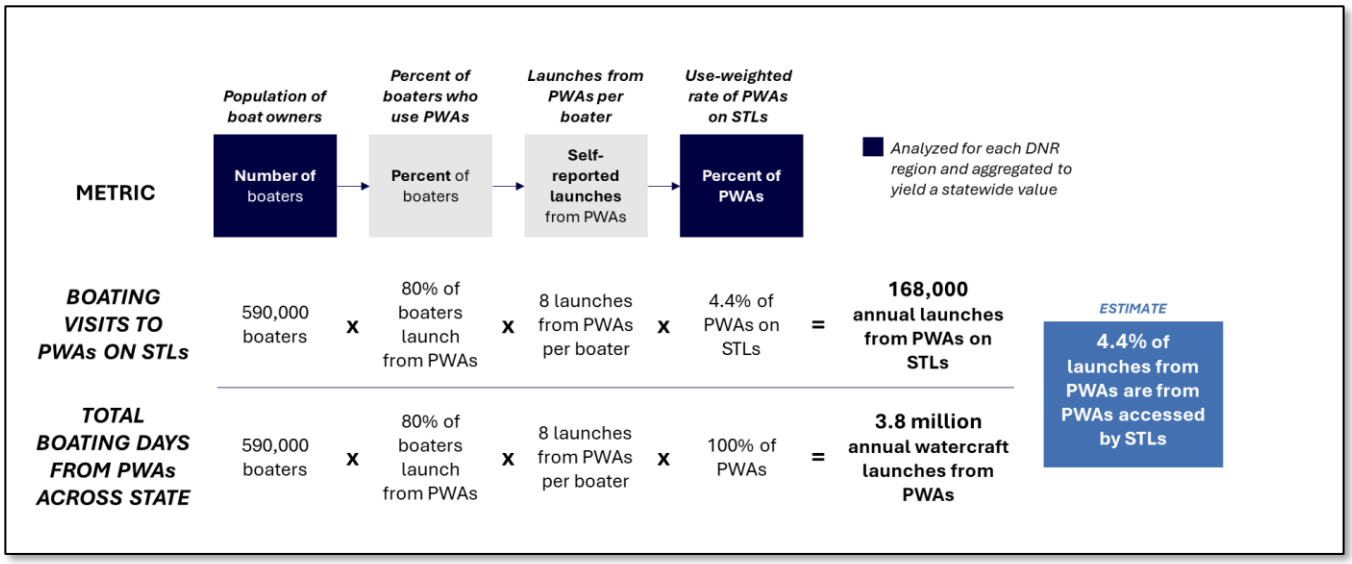
Determine the estimated annual visits by Minnesota-licensed watercrafts to state-owned public water access sites that contain school trust lands and as a percentage of all visits by Minnesota-licensed watercrafts using public water access sites.

Minnesota's network of nearly 12,000 lakes and its extensive system of navigable rivers and streams provide substantial opportunities for water-based recreation. Activities such as canoeing, kayaking, and motorboating are widely practiced across the state and represent an important component of Minnesota's outdoor recreation landscape and tourism economy.

Methodology

Navio relied on three primary data sources to address the legislative requirement: the 2020 Recreational Boating Study (boating study), watercraft license and county location data from the Minnesota DNR License Center, and Geographic Information System (GIS) analysis provided by Minnesota IT Services (see Figure 12). Because the legislative requirement pertains specifically to watercraft launched from public water access sites (PWAs), the analysis excludes launches from non-public locations, including residential docks, private marinas, and other restricted-access sites. As a result, data associated with these non-public launch points is not incorporated into the calculations presented in this section.

Figure 12: Methodology to estimate percent of watercraft launches from PWAs that are from PWAs on STLs



The methodology involves four steps:

- **Population of boat owners:** Applying license and county data from DNR's License Center and the boating study to estimate the number of boaters using their watercraft in each DNR region. More information about DNR regions is located in the Fishing section of this study (see page 22).
- **Percentage of boaters who use PWAs:** Analyzing data from the boating study to determine the percent of boaters who launch watercraft from a PWA each year.
- **Launches from PWAs per boater:** Analyzing information from the boating study to determine the average number of days each boater launched watercraft from a PWA each year.
- **Use-weighted rate of PWAs on STLs:** A statewide rate calculated using an approach that weights each DNR region's percentage of PWAs on STLs by its concentration of boaters.

The rate of PWA visits was calculated using a use-weighted approach, analyzed separately for each DNR region and then aggregated to produce a statewide estimate. This method accounts for regional variation in the number of PWA sites, the density of school trust lands, and the geographic patterns of where watercraft owners typically launch.

DNR does not track visit frequency for individual public water access sites (PWAs) or collect information on the specific water bodies used by boaters. However, during watercraft registration, owners are required

to report the county in which they expect to use their watercraft most frequently. This License Center dataset provides the best available statewide indicator of boating activity and was used to estimate watercraft use within each of the four DNR regions and the seven-county metropolitan area.

For modeling purposes, the analysis assumes that PWA use is evenly distributed within each DNR region. Under this assumption, visits were allocated proportionally across regions based on the distribution of PWAs. Using this method, the share of watercraft visits occurring at PWAs located on school trust lands (STLs) was estimated to be proportional to the percentage of PWAs situated on STLs within each region. This calculation produces the statewide, use-weighted rate of PWA use on STLs (see Figure 12).

Analysis

Population of boat owners
The boating study accounted for individuals who owned multiple watercraft, providing a reliable basis for converting the total number of licenses into an estimated number of unique owners in 2020. Navio assumed that this ownership ratio remained stable across the study period and applied it to DNR License Center data on licensed watercraft to estimate the boat-owning population for each year from 2021 through 2024. This analysis was conducted separately for each DNR region. Based on this approach, the statewide average annual boat owner population was estimated at approximately 591,000.

Percentage of boaters who use PWAs
According to the boating study, 80% of Minnesota boat owners reported using public water access sites (PWAs) to launch their watercraft, representing an average of approximately 467,000 boaters accessing the water through PWAs each year.

Total launches from public water access sites
The boating study asked respondents who reported using PWAs to estimate how many times per year they launched watercraft from these sites. Because responses were provided in ranges (e.g., “1–2,” “21–50”), the analysis used the midpoint of each range, weighted by the percentage of respondents selecting that option, to calculate the average frequency of PWA use. Using this method, individuals who launched watercraft from PWAs were estimated to do so an average of eight times per year, resulting in approximately 3.8 million watercraft launches annually statewide.

Use-weighted rate of PWAs on STLs
Although STLs comprise 6.4% of all public water access sites (PWAs) statewide, this simple statewide ratio does not accurately reflect where boaters actually launch their watercraft. Boating activity is concentrated in DNR regions that contain proportionally few or no STLs. For example, the Central region and the seven-county metropolitan area together account for approximately half of all PWA launches but contain less than 1% of PWAs located on STLs (see Table 7 on page 23). To account for this geographic imbalance, Navio weighted each region’s number of PWAs on STLs by its share of total watercraft launches. Using this approach, an estimated 4.4% of all launches from PWAs occur at sites located on school trust lands.

Results

Approximately 3.8 million launches from public water access sites (PWAs) occurred statewide each year between 2020 and 2024. Using the distribution of PWAs and the counties in which registrants indicated they most frequently used their watercraft, an estimated 168,000 launches, representing 4.4% of annual visits, took place at PWAs located on school trust lands (see Table 10). Although STLs contain more than 6% of all access sites statewide, the overall share of visits to PWAs on STLs is lower because a

disproportionately large number of launches occur in the Twin Cities metropolitan area and the Southern DNR region, where few STLs are present.

Table 10: Results of watercraft analysis

Year	2020	2021	2022	2023	2024	Average
Number of boaters	592,000	596,000	592,000	591,000	585,000	**591,000**
Boaters using PWAs	467,000	471,000	467,000	467,000	462,000	**467,000**
Total launches from PWAs	3,800,000	3,800,000	3,800,000	3,800,000	3,700,000	**3,800,000**
Launches from PWAs on STLs	167,000	169,000	168,000	169,000	168,000	**168,000**
Percent of launches on STLs	**4.4%**	**4.4%**	**4.4%**	**4.4%**	**4.5%**	**4.4%**

Overall, these results indicate that school trust lands play a modest but regionally important role in supporting public water access across Minnesota. While statewide usage at STL PWAs represents a relatively small share of total boating activity, these lands provide valuable and often critical access points in northern regions, where alternative public water access is more limited.

Trails

LEGISLATIVE REQUIREMENT

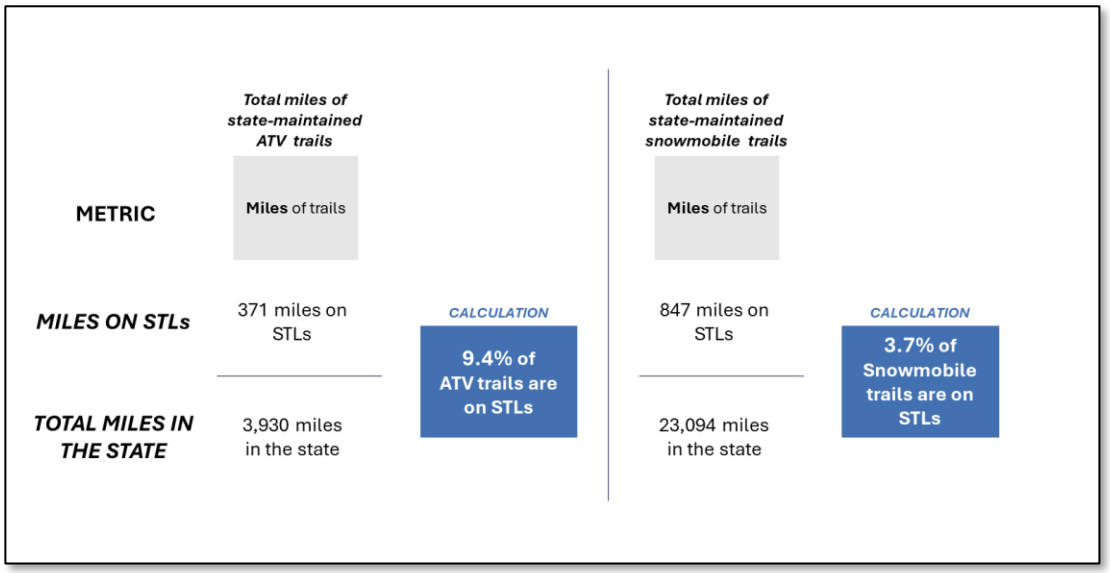
Determine the total number of miles of state-maintained snowmobile trails and all-terrain vehicle trails that are on school trust lands and as a percentage of total miles of state-operated trails for each purpose.

Minnesota DNR manages an extensive statewide trail system that supports recreation, conservation, and outdoor access for residents and visitors. The system includes thousands of miles of motorized and non-motorized routes that provide year-round opportunities for activities that include hiking, biking, snowmobiling, and all-terrain vehicle use. Many of these trails cross a complex mix of land ownership types including school trust lands and other public and private lands, resulting in routes that frequently transition across multiple jurisdictions.

Methodology

The state-maintained trail system includes 3,930 miles of all-terrain vehicle (ATV) trails and 23,094 miles of snowmobile trails, with both networks heavily concentrated in northern Minnesota. DNR Parks and Trails (DNR PAT) provided the trail mileage data used to calculate the total mileage of state-maintained ATV and snowmobile trails located on school trust lands (STLs). This mileage is presented as a share of the statewide trail system (see Figure 13 on page 29). For the purposes of this section, the term ATV refers to DNR's broader Off-Highway Vehicle (OHV) category, which includes all-terrain vehicles as well as off-highway motorcycles (OHMs) and off-road vehicles (ORVs).

Figure 13: Methodology to calculate percent of ATV and snowmobile trails on STLs



To determine the mileage of ATV and snowmobile trails located on school trust lands, DNR PAT first identified the total statewide mileage for each trail type. A 10-meter buffer was applied to the statewide trail network to ensure accurate spatial alignment with underlying land ownership. Using this buffered dataset, DNR calculated and aggregated the miles of ATV and snowmobile trails that intersected STL parcels within each DNR administrative region.

Analysis and Results

An estimated 9.4% of state-maintained ATV trails are located on school trust lands. An estimated 3.7% of state-maintained snowmobile trails are also situated on school trust lands (see Table 11 and Table 12).

Table 11: ATV trail mileage by DNR Region

DNR Region	ATV trail miles	ATV trail miles on STLs	% of total ATV trail miles on STLs
Northwest	1,684	92	**5.4%**
Northeast	2,087	276	**13.2%**
Central	119	3	**2.5%**
Southern	40	0	**0.0%**
Total	**3,930**	**371**	**9.4%**

Table 12: Snowmobile trail mileage by DNR Region

DNR Region	Snowmobile trail miles	Snowmobile trail miles on STLs	% of total Snowmobile trail miles on STLs
Northwest	6,903	147	**2.1%**
Northeast	5,196	672	**12.9%**
Central	5,666	28	**0.5%**
Southern	5,329	0	**0.0%**
Total	**23,094**	**847**	**3.7%**

Overall, these results show that school trust lands make a meaningful contribution to Minnesota's recreational trail network, particularly in the northern regions where these lands are more concentrated. Although their share of total statewide trail mileage is modest, school trust lands provide important connectivity and access for motorized and non-motorized users in areas where alternative routes are limited.

State Parks and Recreation Areas

LEGISLATIVE REQUIREMENT

Determine the total amount of acres of school trust lands located within state parks and recreation areas and as a percentage of all acres of land in state parks and recreation areas.

Minnesota's state parks and recreation areas provide diverse outdoor recreation opportunities for millions of visitors each year. Distributed across the state, these units offer year-round access to activities such as hiking, camping, wildlife observation, and water-based recreation. Together, they serve as a core component of Minnesota's outdoor recreation system. Several state parks and recreation areas contain parcels of school trust lands (STLs) within their boundaries.

Analysis and Results

A Geographic Information System (GIS) analysis identified approximately 850 acres of school trust lands located within two state parks and two state recreation areas. By comparing school trust land acreage to the total DNR-managed acreage of these units, Navio determined that school trust lands account for about 0.4% of the nearly 236,000 acres encompassed by state parks and recreation areas statewide (see Table 13).

Table 13: State parks and state recreation areas containing STLs

State Park (SP) or State Recreation Area (SRA)	Total Acres	STL Acres	STL % of acreage
Iron Range Off-Highway Vehicle (IROFHV) SRA	1,794	792.8	**44%**
Cuyuna Country SRA	3,289	52.2	**1.6%**
Lake Vermilion-Soudan Underground Mine SP	4,132	3.4	**0.1%**
George H. Crosby Manitou SP	6,200	0.2	**0.0%**
All other state parks and state recreation areas	220,456	0	**0.0%**
Total	**235,870**	**848.6**	**0.4%**

Although the overall share is small, these overlapping acres support recreational activities such as hiking, camping, and wildlife observation. School trust lands within state parks and recreation areas enhance visitor experiences and contribute to the accessibility and ecological diversity of Minnesota's park system, particularly in northern regions where school trust lands are more prevalent.

Other Recreational Activities

LEGISLATIVE REQUIREMENT

Identify any other uses of school trust lands for outdoor recreation that include individuals purchasing a permit or paying a fee for access to the school trust lands and the percentage of the total permits or fees for that purpose.

This section addresses two additional recreational uses of school trust lands: state forest campgrounds and dedicated trails for cross-country skiing and horseback riding.

State Forest Campgrounds

Minnesota's state forest campgrounds provide rustic, low-amenity camping opportunities that support access to a wide range of forest-based recreation. These campgrounds are distributed across state-managed forest lands and offer convenient starting points for activities such as hiking, hunting, water access, and off-highway vehicle use. State forest campgrounds operate on a first-come, first-served basis and provide only basic amenities such as a cleared campsite, fire ring, and vault toilet. These campgrounds rely on an honor system for fee payment.

Analysis and Results

Twenty-seven of Minnesota's 54 state forest campgrounds are located on school trust lands, representing one-half of all state forest campgrounds statewide. These campgrounds are concentrated primarily in the northern third of the state. The George Washington State Forest contains the largest number of campgrounds situated on school trust lands with seven, followed by the Finland and Kabetogama State Forests, which each contain three. All fees collected from campgrounds located on school trust lands are deposited into the Permanent School Fund.

These findings demonstrate that school trust lands make a meaningful contribution to Minnesota's outdoor recreation system by supporting a substantial share of state forest camping opportunities. Because state forest campgrounds are heavily concentrated in northern regions where school trust lands are most prevalent, these lands play a disproportionately important role in providing forest-based camping and facilitating access to public lands.

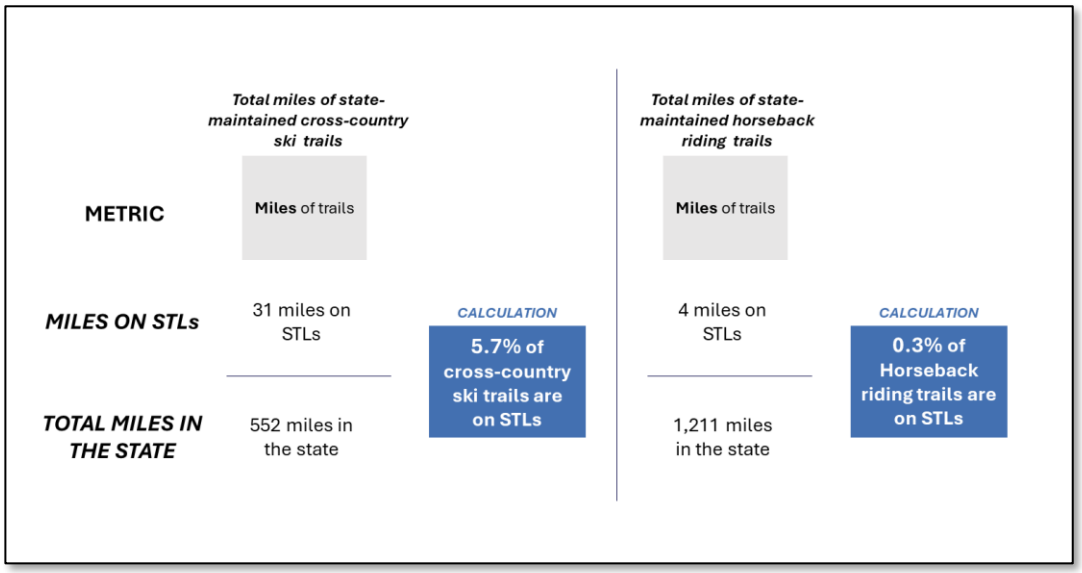
Cross-Country Ski and Horseback Riding Trails

DNR maintains an extensive network of trails across Minnesota that support cross-country skiing and horseback riding. Participation in these activities requires a trail pass. As with snowmobile and all-terrain vehicle (ATV) trails, these routes traverse a mix of land ownership types and frequently cross in and out of school trust land boundaries.

Methodology

To determine the mileage of cross-country ski and horseback riding trails located on school trust lands, DNR Parks & Trails identified the total statewide mileage of each trail type and applied a 10-meter buffer to the trail network to ensure accurate spatial alignment. Using this buffered dataset, DNR calculated and aggregated the mileage of each trail type that overlapped with school trust land parcels across the DNR Administrative Regions. These results were then used to determine the proportion of each statewide trail system situated on school trust lands (see Figure 14 on page 32).

Figure 14: Methodology to determine cross-country ski and horseback riding trail miles on STLs



Analysis and Results

School trust lands support a modest but regionally meaningful share of Minnesota's designated cross-country ski and horseback riding trails. Of the 552 miles of state-maintained cross-country ski trails, 31 miles (5.7%) are located on school trust lands. Similarly, four miles (0.3%) of the state's 1,211 miles of managed horseback riding trails occur on school trust lands (see Figure 14). These findings indicate that while school trust lands play a supporting rather than primary role in providing these trail-based recreation opportunities, they contribute to access in key regions of the state. The Permanent School Fund does not receive any fee revenue from cross-country ski or horseback riding trail use.

Signage

LEGISLATIVE REQUIREMENT

Estimate the cost of posting signage near entrances to school trust lands declaring that certain portions of the public land that are being used for outdoor recreation is school trust land.

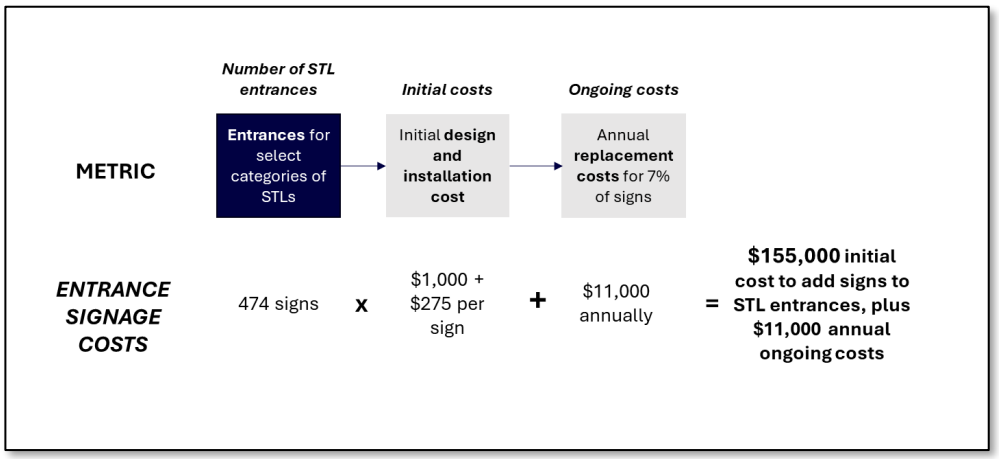
Unlike state parks, state forests, or wildlife management areas where entrance signage is standard, Minnesota DNR does not currently mark entrances to school trust land (STL) parcels. As a result, the public has limited ability to recognize when they are recreating on lands held in trust for Minnesota's public schools. To address this gap, this study requires estimating the cost to develop and install signs that clearly identify entrances to STLs.

This section describes the methodology used to estimate the costs associated with designing, installing, and maintaining such signage. These estimates reflect both the initial capital investment needed to implement the signage program and the ongoing costs required to sustain it.

Methodology

The Office of School Trust Lands identified the school trust land "entrances" that would require signage to comply with the legislative requirement. Based on this inventory, DNR developed cost estimates for implementing a signage program. These estimates include the one-time costs associated with sign design, fabrication, and installation, as well as the ongoing costs of routine maintenance and periodic replacement (see Figure 15).

Figure 15: Methodology to estimate costs of adding signs at STL entrances



Analysis

Identifying School Trust Land Entrances

To develop a practical and consistent approach for identifying locations that would require school trust lands signage, OSTL limited the analysis to STL parcels with clearly defined public access points. This focus was necessary because most STLs are embedded within larger, mixed-ownership landscapes where boundaries are not readily apparent to the public. OSTL identified two types of qualifying entrances: (1) access points located directly on an STL parcel, such as public water access sites, and (2) access points that lead to an STL parcel through another property, such as a state park or state forest road.

Using these criteria, OSTL determined that 474 entrance locations would require signage. More than half of these entrances occur at public water access sites (41%) or along the Boundary Waters Canoe Area Wilderness boundary (15%), reflecting the concentration of STLs in northern Minnesota and the prominence of water-based access in these regions.

Initial Costs

OSTL determined that a 12-inch by 18-inch metal sign mounted on a metal post would provide appropriate and consistent identification for school trust land entrances. This sign type aligns with current DNR standards, as the agency uses the same size and material to mark the boundaries of Wildlife Management Areas and for interpretive signage within state parks and recreation areas. Because these signs are already in regular production, the costs associated with fabrication, materials, and installation are well established through existing DNR signage programs (see Table 14 on page 34).

Table 14: Costs to design and install STL entrance signs

Cost element	Unit	Cost
Design cost	One-time cost	**$1000.00**
Printing, hardware and posts	Per sign	**$74.18**
Mobilization and installation	Per sign	**$200.00**
Total including contingencies and administrative costs for 474 signs	**Total**	**$155,000**

Recurring costs

OSTL estimated that approximately 7% of installed signs will require replacement each year, primarily due to vandalism. Annual replacement cost estimates include hardware, installation labor, and associated administrative expenses, totaling approximately $330 per sign. Beginning in the second year of implementation, the total estimated annual replacement cost is approximately $11,000 and is projected to increase over time at the rate of inflation.

Results

The total initial cost to install signage at 474 entrances to school trust lands is estimated at approximately $155,000. Annual maintenance and replacement costs are projected at roughly $11,000 per year and are expected to increase over time with inflation.[10]

Maps

LEGISLATIVE REQUIREMENT

Estimate the cost of updating recreational use maps and other electronic and printed documents to distinctly label school trust lands that are contained within or are a part of state recreational areas, parks and trails.

Minnesota DNR supports wayfinding for outdoor recreators through printed maps available at agency facilities and digital maps that can be downloaded online. At present, these maps do not identify school trust lands (STLs) located within or adjacent to the areas they depict. Likewise, the state's *Recreation Compass* (a web-based mapping application that provides information about recreation facilities statewide) does not display STL boundaries or designations.

Methodology

OSTL evaluated the number of printed maps that would require updates and identified practical methods for labeling school trust lands. For printed materials, OSTL collaborated with DNR staff to estimate redesign and printing costs for updated map versions. For digital products, OSTL and DNR estimated the developer hours and associated expenses needed to update the *Recreation Compass* interface and incorporate STL boundary information.

Analysis and Results

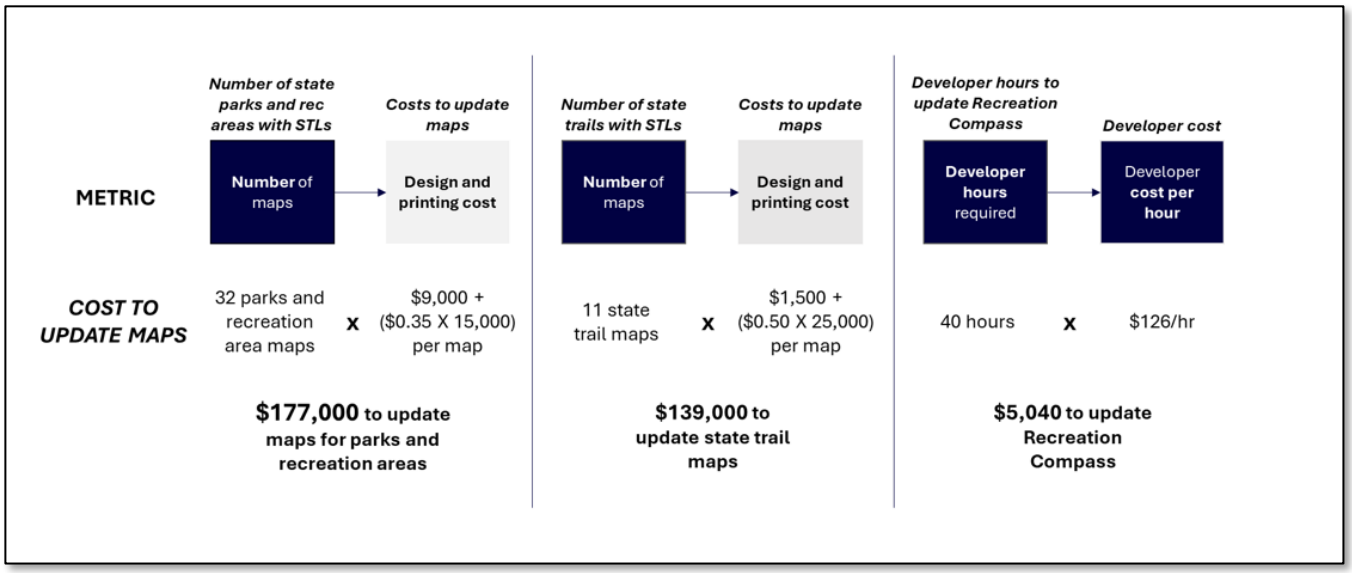
OSTL determined that the most cost-effective approach for depicting school trust lands on printed maps would be to include a brief text reference on maps of state parks, recreation areas, and state trails that contain STL parcels. In total, 43 printed maps would require updates, including 27 state forest campground maps, four state recreation area maps, one state forest day-use area map containing STL

[10] A detailed breakdown of the assumptions and supporting calculations can be found on page 46 in Appendix 2.

parcels, and 11 state trail maps intersecting STL parcels. Based on DNR printing and quantity assumptions, updating these 43 maps was estimated to cost approximately $316,000.

For digital updates to the *Recreation Compass* web application, DNR estimated that 40 hours of developer time would be needed to revise the mapping interface and add an STL layer. This work would result in a one-time cost of approximately $5,040. Results of this analysis are summarized in Figure 16.[11]

Figure 16: Estimated cost to update maps containing STLs



Recreational Use in Other States

Historically, state trust lands have generated revenue primarily through extractive and consumptive activities such as mining, timber harvesting, and livestock grazing. As markets for these traditional uses shift and public values evolve, many states are exploring a broader range of strategies for generating income. Recreation has emerged as one potential avenue for revenue generation, offering opportunities to diversify income sources while enhancing public access and enjoyment of state trust land assets.

While most states allow outdoor recreation on their trust lands, the policies governing access, permitted uses, and revenue generation vary considerably. Significant differences exist in the types of authorized recreational activities, access requirements, fee structures, and revenue distribution methods. Although recreation is generally permitted, few states have developed comprehensive systems that effectively capture and return its economic value to trust beneficiaries. States generally manage recreational use on trust lands through one or a combination of four primary models.

- **Open public access:** The first model allows open public access to trust lands at no cost, except where land management agencies enact temporary or permanent closures due to incompatible uses (e.g., mining operations). Under this approach, recreation is viewed primarily as a public benefit rather than a revenue-generating activity. Minnesota largely follows this model, with recreation-based revenue limited to fees collected from state forest campground use, certain

[11] A detailed breakdown of the assumptions and supporting calculations can be found on page 48 in Appendix 2.

snowmobile and off-highway vehicle (OHV) trail permits, and a small number of recreational leases on school trust lands.

- **No public access:** At the opposite end of the spectrum, some states have chosen to prohibit all public access to their trust lands, restricting entry solely to state employees or authorized lessees. This second model eliminates recreational use entirely. However, it has largely been discontinued among trust land states, as most have recognized the public and political value of allowing at least some level of recreational access.
- **Recreation access permits:** Under the third model, states sell recreation access permits (similar to hunting or fishing licenses) allowing individuals to legally recreate on state trust lands. Persons without permits are excluded from access. Revenues from permit sales generally flow to the trust beneficiaries, although the entity selling the permits receives a commission, and the managing agency may retain a portion to cover administrative expenses.
- **Recreation leases:** The fourth model involves negotiating access leases with other public agencies, private organizations, or individuals. These leases typically grant exclusive or semi-exclusive recreation rights in exchange for a negotiated payment, thereby generating direct revenue for trust beneficiaries.

OSTL and Navio reviewed how several states manage recreational use on their trust lands. The analysis focuses on Colorado, Montana, New Mexico, Utah, and Wyoming, selected for the size of their trust land portfolios and the diversity of their recreational policies and management practices. Minnesota is included for comparison and to help inform future considerations by OSTL and DNR should the state explore alternative approaches to managing recreation on school trust lands.

Minnesota

Minnesota generally allows free public recreation on school trust lands. Most lands are open for activities such as hunting, fishing, hiking, camping, snowmobiling, and off-highway vehicle use, unless access is limited by other uses that generate revenue, such as mining, timber management, or infrastructure development.

Recreation generates minimal direct revenue, primarily from state forest campground fees, snowmobile and OHV trail permits, and a small number of recreation-related leases. There is no general access permit for school trust lands, so most recreational use does not result in payment to the Permanent School Fund.

Overall, Minnesota prioritizes broad public access, relying on other land uses to generate revenue for trust beneficiaries. Recreation is treated as a compatible use rather than a significant revenue source.

Colorado

Under Colorado law, state trust lands are closed to public entry or use unless individuals obtain prior written permission from the State Land Board (SLB). Unauthorized entry is subject to penalties and fines, and wildlife-related violations may also result in the loss of hunting and fishing privileges. Reflecting its philosophy that recreational use must generate revenue for trust beneficiaries, the SLB manages these lands as private property.

Colorado Parks and Wildlife (CPW) leases approximately one million of Colorado's 2.8 million acres of school trust lands to provide public access for hunting and fishing. CPW pays the SLB about $1.6 million

annually for this access. In addition, roughly 400,000 acres of school trust lands are leased for private recreational purposes, including guided and private hunting and fishing, hiking and horseback riding, backcountry survival courses, mountain biking trails, archery and firearm ranges, private campgrounds, endurance events, and feature film productions. These private recreational leases generate approximately $2.3 million annually. All lease revenues are deposited into the state's Public School Permanent Fund.

Montana

In Montana, individuals must obtain a conservation license from the Department of Fish, Wildlife and Parks to legally recreate on state trust lands. The license is required for all residents and nonresidents aged 12 and older and authorizes access to the state's 5.2 million acres of trust lands for a wide range of activities, including hunting, fishing, hiking, camping, snowmobiling, biking, trapping, horseback riding, wildlife viewing, outfitting and guiding, and both motorized and watercraft use. Of the $8.00 license fee, $3.50 is allocated to the state's Public School Fund (PSF), generating approximately $2 million annually. Hunters and anglers must also purchase separate, activity-specific licenses in addition to the conservation license to hunt or fish on trust lands.

Montana adopted the conservation license system in 2023 to simplify its recreation fee structure and help offset the rising costs of managing trust lands amid increasing public use and associated maintenance needs. Individuals recreating on trust lands without a valid conservation license may receive a written warning for a first offense, followed by citations for subsequent violations.

Montana also issues Special Recreational Use Licenses (SRULs) for commercial or "concentrated" recreational activities on state trust lands. Activities requiring an SRUL include outfitting and guiding, trapping, special events and group uses, and facility rentals. These licenses generate approximately $300,000 annually for the PSF. Overall, Montana's recreation program plays an important role in fulfilling the state's constitutional mandate to generate revenue from trust assets.

New Mexico

The New Mexico State Land Office (SLO) manages approximately nine million acres of state trust land. Public access to these lands is not open by default and generally requires a valid recreational access permit or license, depending on the type of activity.

In 2019, the State Land Office (SLO) launched its *Open for Adventure* Outdoor Recreation Campaign in partnership with the New Mexico Wildlife Federation. The campaign aims to expand recreational opportunities on state trust lands and diversify revenue sources. Public access is granted through the purchase of a $35 annual recreational access permit (RAP), which authorizes a range of low-impact activities such as hiking, biking, birdwatching, wildlife viewing, water-based recreation, and bouldering. Hunting requires an additional license. Although the SLO did not share specific revenue data from RAP sales, it reports a 425% increase in permits issued over the past several years, demonstrating growing public interest and strong demand for recreation on state trust lands.

In addition to general access provided through the RAP system, the State Land Office (SLO) promotes specific trust land sites that are formally designated for recreational use. These areas often feature improved access, signage, or partnerships with local organizations and are intended to highlight user-friendly opportunities for permitted recreation. The SLO is also expanding the use of long-term recreational leases, formal agreements with cities, counties, or nonprofit organizations, to manage trust lands for public use. For example, in 2023, the SLO executed a 40-year lease with the City of Socorro to preserve

open space and support nonmotorized recreation. These leases diversify trust land uses while generating consistent revenue for trust beneficiaries through rental payments.

While New Mexico has expanded recreational opportunities, important limitations remain. Not all state trust land is accessible, and certain uses, such as camping, are restricted to specific user groups or areas. Using these lands without permission from the state or the lessee is considered trespass.

Utah

In Utah, "trust lands are not public lands." The state's Division of Wildlife Resources (DWR) makes an annual payment to the Trust Lands Administration (TLA) to provide public access to Utah's 3.3 million acres of trust lands that are not under exclusive lease or otherwise restricted from public use. The terms of this payment are renegotiated every 15 years based on the private market lease value of the land. Under the most recent agreement, signed in 2017, the Permanent State School Fund receives an annual payment of $1.8 million in exchange for public recreational access to these lands.

Commercial recreational uses on Utah's trust lands require a right-of-entry permit, which applies to nonexclusive, short-term, and low-impact activities such as guided tours, races, or outdoor education programs. This permit system enables the Trust Lands Administration to regulate access, protect natural resources, and ensure that the state receives fair market value for commercial activities conducted on trust lands. Right-of-entry permits generate more than $300,000 annually for trust beneficiaries.

In addition, Utah has a long-standing practice of leasing state trust lands to other government agencies, such as the Bureau of Land Management and the Utah Division of State Parks, for recreational management. Leasing these interspersed parcels helps consolidate land management, improve visitor experiences, and enhance public access across broader landscapes.

Wyoming

In Wyoming, the Office of State Lands and Investments (OSLI) manages approximately 3.6 million surface acres of state trust lands. Since 1988, the state has allowed no-fee public access to about 2.5 million of those acres for hunting, fishing, hiking, and other recreational activities. Access is limited to legally accessible parcels, meaning individuals must obtain permission from adjoining private landowners if crossing private property to reach state land. Over time, OSLI has incrementally restricted certain recreational uses in response to resource damage and conflicts with adjacent private lands. Activities such as overnight camping, off-road vehicle use, and open fires are now prohibited, and additional restrictions include limits on firearm discharge and the closure of select parcels to all public access.

For recreational users planning organized or commercial activities (such as competitive events or guided tours) Wyoming requires a temporary use permit. These permits apply to short-term activities that do not fit within other lease categories and ensure that commercial or high-impact recreation is consistent with the state's fiduciary responsibility to manage trust lands for the benefit of trust beneficiaries.

Wyoming law also authorizes the long-term leasing of trust lands for recreational purposes such as cabin sites, public campgrounds, and ski areas. These leases are intended to support recreational developments that provide public benefits while generating revenue for trust beneficiaries. Such activities are typically authorized through special use leases, which apply to nonagricultural and nongrazing purposes, including recreation. Administered by the Office of State Lands and Investments (OSLI), these leases are governed by statutes and regulations requiring that the state receive at least fair market value while safeguarding the

trust's long-term interests. Special use leases therefore provide an additional mechanism for aligning public recreational use with Wyoming's fiduciary mandate to benefit public education.

Table 15: Comparison of recreational use of trust lands in six states

State	Access Rules	Recreation Approach	Revenue Sources	Policy Focus	Revenue Emphasis	Approximate Annual Revenue
Minnesota	Open, no general fee	Public benefit model (open public access)	Limited campground fees; trail permits; small number of leases	Recreation treated primarily as a public benefit; economic value largely uncaptured	Limited to Moderate	Minimal
Colorado	Closed unless authorized	Recreation leases; agency access lease	Statewide access lease; private recreation leases	Trust lands managed as private assets; access must generate revenue	Strong	$3.9 Million
Montana	Permit required	Recreation access permits; commercial licenses	$8.00 conservation license; Leases for commercial use	Broad access preserved while capturing value through low-cost permits	Moderate to Strong	$2.3 Million
New Mexico	Permit required	Recreation access permits; long-term leases	$35.00 annual permit; site-specific and municipal leases	Strategic expansion of recreation to diversify trust revenues	Moderate	Undisclosed but growing
Utah	Not public land	Agency compensation; permits; leases	Annual access payment; right-of-entry permits	Public access explicitly compensated at market-based rates	Strong	$2.1 Million
Wyoming	Partially open, no fee	Open access with restrictions; permits; leases	No-fee access; temporary use permits; special use leases	Gradual tightening of access to protect trust value	Moderate	Limited

Summary

This review demonstrates that there is no single model for managing recreational use on school trust lands. States vary widely in how they balance public access with fiduciary obligations to trust beneficiaries. Some emphasize broad public access with limited fee recovery, while others rely on permits, leases, or direct compensation when recreation limits revenue-generating uses. These differences reflect variation in land distribution, recreation demand, statutory authority, and institutional structure. Together, they provide a useful framework for understanding Minnesota's policy options and the tradeoffs involved in aligning recreational use with long-term trust responsibilities.

Across the six states examined (see Table 15), approaches to recreational access on state trust lands vary along a continuum reflecting differing priorities around public access, fiduciary responsibility, and revenue generation. At one end, Minnesota follows an open-access, public-benefit approach in which recreation is treated primarily as a social good rather than a revenue-generating use. As a result, direct income from recreation is minimal and much of the associated economic value is not captured.

Colorado and Utah occupy the opposite end of this continuum. Both states treat trust lands explicitly as private trust assets that must generate revenue and require compensation for public access. Colorado's statewide access lease and Utah's market-based access payments prioritize revenue generation and produce consistent, multimillion-dollar annual revenues.

Montana and New Mexico represent a middle ground. Both require permits for general access while keeping fees relatively low to preserve broad public use. Montana's universal conservation license and New Mexico's tiered permit and lease system allow these states to capture recreational value while maintaining accessibility. Both states generate meaningful revenue, with New Mexico experiencing particularly rapid growth in participation and permit sales.

Wyoming employs a hybrid approach, combining no-fee access on some lands with increasing use of permits, restrictions, and special leases. While public access remains relatively broad, the state has incrementally tightened recreational rules to reduce conflicts and resource impacts. Recreation-related revenues remain limited compared to states that more actively monetize access.

Overall, the comparison shows that states treating trust lands as revenue-generating assets capture significantly more economic value from recreation than states prioritizing open public access. These policy choices reflect different views about whether trust lands should be managed mainly for public use, for generating income for beneficiaries, or for some combination of both.

Appendix 1: Glossary of Terms

Accessible land for hunting	*For this study only:* A term describing land in which hunters would be most likely to concentrate their efforts based on the presence of different land covers. Which land covers are determined to be accessible varies by species, as the assessment considers the likely species distribution in the different habitat types and the ease with which hunters can pursue their targets in them (e.g. road or trail access, presence of water).
Applicable fishing method	*For this study only:* A term describing the types of fishing that could require use of a public water access site, whether an access site is on a parcel of school trust land or not.
Bear Management Unit (BMU)	Geographic areas designated by the Minnesota Department of Natural Resources to regulate the number of licenses issued to bear hunters and manage bear populations.
Beneficiaries	Persons or entities entitled to the benefit of any trust arrangement.
Buffer	*For this study only*: A spatial allowance (specifically 10 meters) applied to trail datasets during GIS analysis to ensure accurate spatial alignment when calculating trail mileage situated on school trust lands.
Deer Permit Area (DPA)	Designated management zones with distinct boundaries used by the Minnesota Department of Natural Resources to monitor deer populations and regulate harvest limits.
Geographic Information System (GIS)	A software system for gathering and analyzing spatial data; used in this study to determine land accessibility and calculate the mileage of trails located on school trust lands.
Land cover	The natural surface components of land that are physically present and visible, integrating and reflecting a given site's major vegetation patterns (i.e. forests, grasslands) and hydrological level (i.e. uplands, wetlands).
Open to hunters	*For this study only:* A term describing all land area that hunters can legally use for the purpose of pursuing target species. Open lands include many types of public lands and select categories of private lands that allow public access for hunting. Whether an individual parcel of land is open for hunting may vary by species.
Permanent School Fund	A constitutionally established trust fund that generates long-term financial support for public K–12 education. The fund is composed of revenue derived from the management of school trust lands as well as investment earnings. Principal in the fund is protected and cannot be spent. Instead, annual investment earnings are distributed to Minnesota's public-school districts and charter schools on a per-pupil basis.
Proportional distribution	*For this study only:* A term describing an analytic approach to allocating estimated recreational use based on the proportion of a specified characteristic (e.g., public water access sites on school trust lands) within a defined zone (e.g., a DNR region). This method assumes that recreation is evenly distributed across all comparable land within a defined zone.

Public lands	Government-owned land, including by city, county, state and federal entities.
Public Water Access Sites	State-owned sites that provide the public with access to bodies of water for activities such as fishing and launching watercraft.
Relevant (small game species)	*For this study only:* A term describing the small game species with natural ranges that overlap with the parts of the state containing school trust lands.
Recreation Compass	A web-based mapping application managed by the Minnesota Department of Natural Resources that provides the public with information about outdoor recreation facilities and opportunities across the state.
Small game	*For this study only:* A term describing the list of 24 species that can be hunted in Minnesota using a small game hunting license and for which the state gathers data.
State Forest Campgrounds	Rustic campgrounds located within state forests that operate on a first-come, first-served basis.
Trust	A legal relationship in which one party holds property for the benefit of another.
Turkey Permit Area (TPA)	Designated geographic zones used by the Minnesota Department of Natural Resources to manage wild turkey hunting seasons and permit distribution.
Use-weighted rate	*For this study only:* A term describing how this study's calculations account for the spatial relationship between hunter concentration and school trust lands in Minnesota. This methodology resulted in a more accurate and representative estimate of recreational activity on school trust lands than would a simple statewide average.

Appendix 2: Supporting Analyses

Appendix 2 provides additional methodological detail and describes the data sources that informed the study's findings across specific recreation types.

Hunting

White-Tailed Deer Hunting

Minnesota DNR provided data from more than 90 Deer Permit Areas (DPAs), derived from multiple years of deer population goal-setting surveys in which hunters reported whether all, most, some, or none of their hunting occurred on public land. For this analysis, these categorical responses were converted to proportional values (all = 100%, most = 66%, some = 33%, none = 0%) and applied to the estimated number of days hunted within each DPA to calculate total public-land hunting days. For DPAs without survey responses, the statewide average proportion of hunting that occurs on public land was used.

The table below presents the estimated results for each DPA. These values were aggregated to produce the statewide total reported in the main body of this report.

DPA	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
101	14,400	5,900	-	**0.0%**
104	10,900	4,400	1,610	**14.8%**
105	44,600	18,200	1,150	**2.6%**
107	17,000	6,900	3,640	**21.4%**
109	11,900	4,900	1,800	**15.1%**
110	25,600	10,500	1,830	**7.1%**
111	8,700	3,500	-	**0.0%**
114	1,000	400	80	**8.0%**
117	1,000	700	50	**5.0%**
118	17,500	11,600	1,310	**7.5%**
119	11,600	7,900	2,140	**18.4%**
126	8,000	4,900	970	**12.1%**
130	7,900	4,800	690	**8.7%**
131	4,400	2,800	440	**10.0%**
132	10,300	8,000	580	**5.6%**
133	15,400	8,100	680	**4.4%**
152	5,900	4,700	210	**3.6%**
155	38,700	15,400	2,190	**5.7%**
156	59,200	17,800	2,630	**4.4%**
157	104,000	28,400	4,180	**4.0%**
159	52,300	18,300	1,360	**2.6%**
169	41,400	26,800	7,670	**18.5%**
171	39,000	20,800	5,250	**13.5%**
172	63,700	43,900	5,530	**8.7%**
173	22,800	11,700	1,990	**8.7%**
176	33,500	19,900	4,260	**12.7%**

DPA	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
177	23,600	11,000	5,240	**22.2%**
178	56,700	25,100	3,750	**6.6%**
181	35,000	18,200	2,050	**5.9%**
182	31,900	13,000	450	**1.4%**
183	50,700	18,500	1,880	**3.7%**
197	34,300	21,900	4,600	**13.4%**
199	3,500	1,400	20	**0.6%**
201	4,100	1,700	210	**5.1%**
203	1,500	600	-	**0.0%**
208	8,800	3,600	160	**1.8%**
209	21,800	8,900	640	**2.9%**
210	31,100	5,300	550	**1.8%**
213	111,700	45,600	940	**0.8%**
214	75,800	30,900	8,860	**11.7%**
215	91,900	37,500	3,760	**4.1%**
218	71,000	29,000	100	**0.1%**
219	51,500	17,300	-	**0.0%**
221	72,100	13,300	670	**0.9%**
222	57,500	10,100	1,540	**2.7%**
223	63,700	23,400	2,580	**4.1%**
224	8,100	6,800	-	**0.0%**
225	92,200	16,000	60	**0.1%**
227	81,500	20,000	760	**0.9%**
229	27,300	6,000	-	**0.0%**
230	16,200	3,600	-	**0.0%**
232	18,300	5,300	-	**0.0%**

DPA	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
233	14,000	4,300	-	**0.0%**
234	9,300	2,900	-	**0.0%**
235	7,400	5,700	-	**0.0%**
236	52,700	14,100	240	**0.5%**
237	11,700	4,100	-	**0.0%**
238	3,100	1,800	-	**0.0%**
239	74,900	30,600	1,220	**1.6%**
240	78,000	31,800	4,660	**6.0%**
241	135,000	25,400	6,760	**5.0%**
246	78,400	37,200	4,760	**6.1%**
248	21,500	5,700	90	**0.4%**
249	53,900	14,900	2,590	**4.8%**
250	14,800	5,300	-	**0.0%**
251	3,100	2,500	-	**0.0%**
252	14,700	3,800	-	**0.0%**
253	21,300	4,400	-	**0.0%**
254	29,200	6,700	-	**0.0%**
255	16,600	5,000	-	**0.0%**
256	18,400	7,500	430	**2.3%**
257	16,100	6,600	90	**0.6%**
258	34,000	16,000	3,670	**10.8%**
259	46,800	28,100	2,450	**5.2%**
260	10,500	4,300	20	**0.2%**
262	9,800	4,000	-	**0.0%**
263	19,400	7,900	1,630	**8.4%**
264	30,200	12,300	3,790	**12.5%**
265	20,100	8,200	120	**0.6%**
266	17,700	7,200	100	**0.6%**
267	11,800	4,800	720	**6.1%**
268	11,600	4,800	2,810	**24.2%**
269	14,500	5,900	-	**0.0%**
270	10,100	4,100	-	**0.0%**
271	11,400	4,700	30	**0.3%**
272	10,000	4,100	-	**0.0%**
273	28,100	11,500	-	**0.0%**
274	11,400	4,800	40	**0.4%**
275	23,900	7,100	-	**0.0%**
277	98,200	40,100	240	**0.2%**
278	18,100	8,000	-	**0.0%**
279	10,500	3,300	-	**0.0%**

DPA	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
280	11,700	3,700	-	**0.0%**
281	29,900	7,900	-	**0.0%**
282	7,900	2,500	-	**0.0%**
283	13,500	4,100	-	**0.0%**
284	20,200	5,400	10	**0.0%**
285	29,800	6,000	-	**0.0%**
286	13,200	4,400	-	**0.0%**
287	1,900	1,600	-	**0.0%**
288	20,700	5,900	-	**0.0%**
289	12,300	3,700	-	**0.0%**
290	27,700	5,900	-	**0.0%**
291	41,800	8,000	10	**0.0%**
292	31,800	7,600	100	**0.3%**
293	16,900	2,600	-	**0.0%**
294	11,700	4,500	-	**0.0%**
295	24,200	8,700	-	**0.0%**
296	17,100	3,400	-	**0.0%**
297	7,400	3,000	150	**2.0%**
298	22,900	12,200	1,050	**4.6%**
299	19,900	4,900	-	**0.0%**
338	19,200	6,200	-	**0.0%**
341	65,900	17,100	170	**0.3%**
604	86,000	36,300	7,530	**8.8%**
605	80,300	19,400	110	**0.1%**
642	7,500	3,000	-	**0.0%**
643	42,200	13,800	-	**0.0%**
644	10,200	4,200	-	**0.0%**
645	31,700	7,500	-	**0.0%**
646	41,000	10,200	140	**0.3%**
647	26,500	5,400	-	**0.0%**
648	33,000	11,600	60	**0.2%**
649	61,800	15,100	150	**0.2%**
655	9,300	2,000	-	**0.0%**
661	4,700	1,900	-	**0.0%**
679	41,500	16,900	1,880	**4.5%**
684	34,100	13,900	2,160	**6.3%**
701	73,500	30,000	-	**0.0%**
State Total	**4,000,000**	**1,400,000**	**141,000**	**3.5%**

Wild Turkey Hunting

The table below presents the estimated results for each Turkey Permit Area. These area-level estimates were then aggregated to produce a single statewide total, which is reported in the main body of the report.

TPA	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
501	49,000	33,000	240	**0.5%**
502	5,300	3,600	-	**0.0%**
503	32,000	22,000	160	**0.5%**
504	11,000	7,200	-	**0.0%**
505	18,000	12,000	20	**0.1%**
506	15,000	10,000	10	**0.1%**
507	88,000	60,000	6,310	**7.2%**
508	64,000	43,000	8,270	**12.9%**
509	13,000	8,800	730	**5.6%**
510	27,000	18,000	350	**1.3%**
511	3,300	2,200	-	**0.0%**
512	2,000	1,400	60	**3.0%**
State Total	**327,000**	**222,000**	**16,000**	**4.9%**

Bear Hunting

The table below presents the estimated results for each Bear Management Unit. These unit-level estimates were then aggregated to produce a single statewide total, which is reported in the main body of the report.

BMU	Total Days Hunted	Days Hunted on Public Lands	Days Hunted on STLs	% Days Hunted on STLs
12	800	500	10	**1.3%**
13	1,200	700	200	**16.7%**
14	20	10	2	**10.0%**
22	300	200	10	**3.3%**
24	1,100	700	100	**9.1%**
25	1,900	1,200	400	**21.1%**
27	1,700	1,100	300	**17.6%**
28	300	200	40	**13.3%**
31	2,400	1,500	200	**8.3%**
41	1,100	700	100	**9.1%**
45	2,300	1,400	200	**8.7%**
46	3,500	2,100	300	**8.6%**
47	400	200	50	**12.5%**
51	7,900	4,900	700	**8.9%**
53	100	80	1	**1.0%**
451	5,900	3,600	700	**11.9%**
No Quota Area	26,700	16,500	2,600	**9.7%**
State Total	**57,200**	**35,500**	**5,900**	**10.3%**

Small Game Hunting

Of the 24 species included in DNR's Small Game Survey, 20 were incorporated into this analysis. Four species were excluded because their natural ranges do not sufficiently overlap with school trust lands. The species omitted for this reason were the fox squirrel, mourning dove, ring-necked pheasant, and white-tailed jackrabbit.

Species	Presence on STLs
Badger	Yes
Canada goose	Yes
Coot	Yes
Cottontail rabbit	Yes
Coyote	Yes
Crow	Yes
Duck (all species)	Yes
Fox squirrel	No
Gray fox	Yes
Gray partridge	Yes
Gray squirrel	Yes
Mourning dove	No

Species	Presence on STLs
Other geese	Yes
Raccoon (Mar-Feb)	Yes
Rails & Gallinules	Yes
Red fox (Mar-Feb)	Yes
Ring-necked pheasant	No
Ruffed grouse	Yes
Sharp-tailed grouse	Yes
Snipe	Yes
Snowshoe hare	Yes
Spruce grouse	Yes
White-tailed jackrabbit	No
Woodcock	Yes

Fishing

The following table lists the Public Water Access sites located on school trust lands, organized by county and DNR region.

County	DNR region	PWA name
Aitkin	Northeast	Blackface Lake
Aitkin	Northeast	Blind Lake
Aitkin	Northeast	Hay Lake (S)
Aitkin	Northeast	Moulton Lake
Aitkin	Northeast	Portage Lake
Aitkin	Northeast	Sandy River, Flowage
Aitkin	Northeast	Sissabagamah Lake
Aitkin	Northeast	Taylor Lake
Aitkin	Northeast	Twenty Lake
Becker	Northwest	Dinner Lake
Becker	Northwest	Kane Lake
Becker	Northwest	Shell Lake
Beltrami	Northwest	Beltrami Lake
Beltrami	Northwest	Gull Lake
Beltrami	Northwest	Mississippi River, Bear Den
Beltrami	Northwest	Puposky (north)
Beltrami	Northwest	Rabideau Lake
Beltrami	Northwest	Turtle Lake
Beltrami	Northwest	Turtle River Lake (N)

County	DNR region	PWA name
Beltrami	Northwest	Turtle River, Co Rd 22
Big Stone	South	Big Stone Lake, Hornsteins
Cass	Northwest	Ada Lake
Cass	Northwest	Child Lake
Cass	Northwest	Hand Lake
Cass	Northwest	Hay Lake
Cass	Northwest	Leech Lake, Brevik
Cass	Northwest	Leech Lake, Two Points
Cass	Northwest	Leech Lake, Whipholt Wayside
Cass	Northwest	Long Lake
Cass	Northwest	Lower Trelipe Lake
Cass	Northwest	Margaret Lake
Cass	Northwest	Marion Lake
Cass	Northwest	Mississippi River, Co Rd 3
Cass	Northwest	No-ta-she-bun Lake
Cass	Northwest	Rock Lake
Cass	Northwest	Silver Lake

County	DNR region	PWA name
Cass	Northwest	Washburn Lake
Clearwater	Northwest	Buckboard Lake
Clearwater	Northwest	Walker Brook Lake
Cook	Northeast	Bower Trout Lake
Cook	Northeast	Chester Lake
Cook	Northeast	Christine Lake
Cook	Northeast	Devil Track Lake
Cook	Northeast	Devil Track Lake
Cook	Northeast	East Twin Lake
Cook	Northeast	Elbow Lake
Cook	Northeast	Junco Lake
Cook	Northeast	Lake Superior, Horseshoe Bay
Cook	Northeast	Little John Lake
Cook	Northeast	McFarland Lake
Cook	Northeast	Moosehorn
Cook	Northeast	Otter Lake
Cook	Northeast	Pike Lake
Cook	Northeast	Star Lake
Cook	Northeast	Tom Lake
Cook	Northeast	West Bearskin Lake
Cook	Northeast	West Twin Lake
Crow Wing	Northeast	Bass Lake, Mission
Crow Wing	Northeast	Black Bear Lake
Crow Wing	Northeast	Blackhoof Lake
Crow Wing	Northeast	Greer Lake
Crow Wing	Northeast	Lougee Lake
Crow Wing	Northeast	Mississippi River, Green's Point
Crow Wing	Northeast	Mississippi River, Trommald
Crow Wing	Northeast	Pine Lake
Crow Wing	Northeast	Pine River, Rock Dam
Crow Wing	Northeast	Pine River, Staircase
Crow Wing	Northeast	Platte Lake
Douglas	Northwest	Mina Lake
Hubbard	Northwest	Duck Lake
Hubbard	Northwest	Halvorson Lake
Hubbard	Northwest	Hart Lake
Hubbard	Northwest	Hennepin Lake
Hubbard	Northwest	Little Sand Lake
Hubbard	Northwest	Mantrap Lake (N)
Hubbard	Northwest	Mantrap Lake (S)
Hubbard	Northwest	McCarty Lake
Hubbard	Northwest	Midge Lake
Hubbard	Northwest	Nagel Lake
Hubbard	Northwest	Necktie River

County	DNR region	PWA name
Hubbard	Northwest	Nelson Lake
Hubbard	Northwest	Pickerel Lake
Itasca	Northeast	Antler Lake
Itasca	Northeast	Ball Club Lake (S)
Itasca	Northeast	Barwise Lake
Itasca	Northeast	Bass Lake (SW)
Itasca	Northeast	Bear Lake
Itasca	Northeast	Bello Lake
Itasca	Northeast	Big Fork River, Harrison
Itasca	Northeast	Big McCarthy Lake
Itasca	Northeast	Bowstring Lake (S)
Itasca	Northeast	Burnt-shanty Lake
Itasca	Northeast	Burrows Lake (S)
Itasca	Northeast	Cameron Lake
Itasca	Northeast	Cottonwood Lake
Itasca	Northeast	Crooked Lake (N)
Itasca	Northeast	Decker Lake
Itasca	Northeast	Deer Lake
Itasca	Northeast	Graves Lake
Itasca	Northeast	Jessie Lake
Itasca	Northeast	Johnson Lake
Itasca	Northeast	King Lake
Itasca	Northeast	Larson Lake
Itasca	Northeast	Lawerence Lake
Itasca	Northeast	Little Bass Lake
Itasca	Northeast	Little Bear Lake
Itasca	Northeast	Little Island Lake
Itasca	Northeast	Little Long Lake
Itasca	Northeast	Little Moose Lake
Itasca	Northeast	Little Sand Lake
Itasca	Northeast	Long Lake
Itasca	Northeast	Long Lake, Button Box
Itasca	Northeast	Lost Lake
Itasca	Northeast	Lost Moose Lake
Itasca	Northeast	Mirror Lake
Itasca	Northeast	Mississippi River, Co Rd 72
Itasca	Northeast	Mississippi River, County Line
Itasca	Northeast	Moose Lake
Itasca	Northeast	Morph Lake WMA
Itasca	Northeast	Natures Lake
Itasca	Northeast	O'Reilly Lake
Itasca	Northeast	Owen Lake
Itasca	Northeast	Peterson Lake
Itasca	Northeast	Pickerel Lake

County	DNR region	PWA name
Itasca	Northeast	Pokegama Lake, Tioga
Itasca	Northeast	Rush Island Lake
Itasca	Northeast	Sand Lake
Itasca	Northeast	Smith Lake
Itasca	Northeast	South Sturgeon Lake
Itasca	Northeast	Split Hand Lake
Itasca	Northeast	Thistledew Lake
Itasca	Northeast	Tioga Mine Pit
Itasca	Northeast	Wabana Lake (NW)
Itasca	Northeast	Wabana Lake (SE)
Itasca	Northeast	Wilson Lake
Koochiching	Northeast	Big Fork River, Ben Linn
Koochiching	Northeast	Big Fork River, Big Falls (E)
Koochiching	Northeast	Big Fork River, State Hwy 6 Bridge
Koochiching	Northeast	Little Fork River, Fiedler
Lake	Northeast	Cramer Lake (S)
Lake	Northeast	East Chub Lake
Lake	Northeast	Fall Lake (S)
Lake	Northeast	Greenwood Lake
Lake	Northeast	Island River, Comfort Lake (S)
Lake	Northeast	Lake One
Lake	Northeast	Shamrock Lake
Lake	Northeast	Snowbank Lake Canoe Access (BWCA Entry Point 27/28)
Lake	Northeast	Sullivan Lake
Lake	Northeast	Thunderbird
Lake	Northeast	Wye Lake
Mahnomen	Northwest	Lone Lake
Mille Lacs	Central	Mille Lacs Lake, Cedar Creek
Morrison	Central	Mississippi River, Fletcher Creek
Otter Tail	Northwest	Dead Lake (SE)
Pine	Northeast	Graces Lake
St. Louis	Northeast	Auto Lake
St. Louis	Northeast	Bear Island Lake (NE)
St. Louis	Northeast	Bear Island Lake (S)
St. Louis	Northeast	Bear Lake
St. Louis	Northeast	Big Lake
St. Louis	Northeast	Blackduck Lake
St. Louis	Northeast	Cloquet River, Severson Landing/ Bear Lake Road
St. Louis	Northeast	Coe Lake
St. Louis	Northeast	Eagle Nest Lake (2)
St. Louis	Northeast	Ed Shave Lake
St. Louis	Northeast	Embarrass Mine Pit
St. Louis	Northeast	Fish Lake (S)
St. Louis	Northeast	Gansey Lake
St. Louis	Northeast	Hanson Lake
St. Louis	Northeast	Horseshoe Lake
St. Louis	Northeast	Janet Lake
St. Louis	Northeast	Joseph Lake
St. Louis	Northeast	Kabetogama Lake (N)
St. Louis	Northeast	Kytola Lake
St. Louis	Northeast	Little Lake
St. Louis	Northeast	Loaine Lake
St. Louis	Northeast	Lost Lake
St. Louis	Northeast	Mcquade Lake (N)
St. Louis	Northeast	Morcom Lake, Paleface Creek
St. Louis	Northeast	Mott Pit
St. Louis	Northeast	Nichols Lake
St. Louis	Northeast	Pelican Lake (W)
St. Louis	Northeast	Perch Lake
St. Louis	Northeast	Sand Lake
St. Louis	Northeast	Section 14 Lake
St. Louis	Northeast	Silver Lake
St. Louis	Northeast	Spring Lake
St. Louis	Northeast	St. Louis River, Hush
St. Louis	Northeast	St. Louis River, Skibo Mill
St. Louis	Northeast	Vermilion River, Holmes Creek
St. Louis	Northeast	Vermilion River, Shivley Falls
Stearns	Central	Big Birch Lake, State Forest
Wadena	Northwest	Crow Wing River, Mary Brown, #5
Wadena	Northwest	Granning Lake
	TOTAL	**194**

Other Recreational Activities

The table below lists the state forest campgrounds located on school trust lands, organized by state forest.

State Forest	Unit Name
Birch Lakes State Forest	Birch Lake Campground and Day Use Area
Bowstring State Forest	Cottonwood Lake Campground Moose Lake Campground
Chengwatana State Forest	Snake River Campground
Crow Wing State Forest	Greer Lake Campground
Finland State Forest	Eckbeck Campground and Day Use Area Finland Campground and Day Use Area Sullivan Lake Campground
George Washington State Forest	Bear Lake Campground and Day Use Area Button Box Lake Campground and Day Use Area Larson Lake Campground Lost Lake Campground Owen Lake Campground and Day Use Area Stony Brook Horse Campground Thistledew Lake Campground and Day Use Area
Grand Portage State Forest	Devilfish Lake Campground McFarland Lake Campground
Kabetogama State Forest	Hinsdale Island Wakemup Bay Campground and Day Use Area Woodenfrog Campground and Day Use Area
Land O'Lakes State Forest	Clint Converse Campground and Day Use Area
Pat Bayle State Forest	Twin Lakes Campground
Paul Bunyan State Forest	Mantrap Lake Campground and Day Use Area
Pillsbury State Forest	Rock Lake Campground and Day Use Area
Sand Dunes State Forest	Bob Dunn Horse Campground
Savanna State Forest	Hay Lake Campground and Day Use Area
Two Inlets State Forest	Hungryman Lake Campground and Day Use Area

Signage

The table below itemizes the 474 identified sites requiring signage, organized by location type.

Location	Entrances/signs
Public Water Access Sites	194
Boundary Waters Canoe Area Wilderness (BWCAW)	73
Trailheads	66
State Forests	59
Wildlife Management Areas	36
State Forest Recreation Areas (campgrounds and day use areas)	28
Peatland Scientific and Natural Areas with STLs	10
State Recreation Areas (Iron Range OHV, Cuyuna)	2
State Parks (Lake Vermilion-Soudan Underground Mine, George H. Crosby-Manitou)	2
BWCAW mechanical portages	2

Location	Entrances/signs
Knife River Marina	1
Tioga Recreation Area	1
Total	**474**

The table below outlines the one-time costs required to design, manufacture, and install signage at all 474 identified entrances.

Item	# of items	Cost per item	Total	Notes
Design cost	1	$1,000.00	$1,000.00	*One-time fee*
Mobilization	474	$100.00	$47,400.00	*Portion of sign and install cost*
Sign cost (unit price) *-Screen print* *-Hardware and posts*	474	$74.18 *$54.18* *$20.00*	$35,161.32	*DNR sign shop prices*
Installation (per sign)	474	$100.00	$47,400.00	*Conservative estimate based on WMA boundary sign contract: $62/sign plus an additional $38/sign to account for geographic distance of sign locations compared to WMA boundaries.*
Shipping			$0.00	*Included in install cost*
Contingency			$13,096.13	*10% of project costs*
Legal, fiscal, admin			$10,476.91	*8% of project costs*
Total			**$154,534.36**	

The table below presents the projected recurring annual signage expenses beginning in year two, including maintenance, administrative costs, and the replacement of signs due to damage or loss.

Item	# of items	Cost per item	Total	Notes
Mobilization	33	$100.00	$3,300.00	*Portion of sign and install cost*
Sign cost (unit price) *-Screen print* *-Hardware and posts*	33	$74.18 *$54.18* *$20.00*	$2,447.94	*DNR sign shop prices*
Installation (per sign)	33	$100.00	$3,300.00	*Conservative estimate based on WMA boundary sign contract: $62/sign plus an additional $38/sign to account for geographic distance of sign locations compared to WMA boundaries.*
Shipping			$0.00	*Included in install cost*
Inflation			$287.40	*Annually; 5% of total costs excluding mobilization*
Contingency			$933.53	*10% of project costs*
Legal, fiscal, admin			$746.83	*8% of project costs*
Total			**$11,015.70**	

Maps

The table below details the estimated one-time costs for updating printed map inventories and modifying the digital Recreation Compass interface to identify school trust lands.

Type		# of items	Cost per item	Total	Notes
Printed maps	Design cost – State parks and rec areas	32	$9,000	$9,000	*Total for all maps*
	Design cost - Trails	11	$1,500	$1,500	*Total for all maps*
	Printing cost – State parks and rec areas	15,000 per site	$0.35	$168,000	*One-time cost*
	Printing cost – Trails	25,000 per trail	$0.50	$137,500	*One-time cost*
	Printed maps total			**$316,000**	
Digital maps	Developer cost – *Recreation Compass*	40 hours	$126 / hour	$5,040	*One-time cost*
	Digital maps total			**$5,040**	
	Total			**$321,040**	