as well as the facilities required for the use of the area. Development project proposals may include construction or renovation, site planning, demolition, site preparation and architectural services.

(3) PRIORITIES. Priorities are given to projects which meet urban needs, to activities of the general public over those for a limited group, to basic over elaborate facilities, to participant over spectator type facilities, to projects not having other public or private funds available to them, where a scarcity of recreation land exists and to acquisition over development. Projects which may enhance or preserve natural beauty are encouraged.

(4) OTHER GOVERNMENT REGULATORY REQUIREMENTS. Before construction or development of certain public facilities may be undertaken, formal approval may be required from other state agencies concerning health, safety or sanitation requirements.

(5) ALLOWABLE COSTS—BILLINGS—AUDITS. (a) Project costs will be matched project by project. To be eligible for matching assistance, costs must have been incurred within the project period or the period covered by the agreement, with specific exceptions described in the agreement.

(b) Billings may be submitted when deeds have been received for land acquisition and upon completion of a development project or a useable portion of a large development project.

(c) All payments are contingent upon final audit. Financial records including all documentation to support entries in the accounting records to substantiate charges for each project must be kept available for representatives of the department. Such records shall be retained and available for inspection for a period of 3 years after final payment.

History: Cr. Register, January, 1972, No. 193, eff. 2-1-72.

NR 50.08 Administration of the artificial lake creation grants section 92.18, Wis. Stats.

(1) General provisions:

(a) Aids for land acquisition are limited to the same acreage eligible for full cost sharing assistance under the federal PL-566 program.

(b) Land appraisals shall be based on standards used by the department and land appraisal reports shall be approved by the department.(c) Priorities for approval of grants shall be based on the water-

shed work plan, demonstrated needs, and justification provided.

(d) The depth of any proposed impoundment shall be at least 15 feet over at least one-third of the surface area.

(e) There shall be adequate flow to insure flushing of stored water within a period not to exceed 3 months based on base flow.

(f) In addition to the 300 foot owned horizontal buffer zone required around the recreational impoundment, an additional 700 foot strip of land shall be owned or zoned in accordance with state, county or local ordinances as conservancy district or recreational conservancy district.

(g) Improved public access shall include a minimum of 100 feet of shoreline per mile of lake frontage and public fishing shall be provided.

(h) Recreational development plans and forestry, game and open space management practices on all public lands surrounding impoundments shall be approved by the department.

(i) Hunting privileges shall be provided except on intensively developed areas.

(j) Structures:

1. Cold water streams (containing trout or smallmouth bass or managed for trout or smallmouth bass).

a. Design of single purpose structures on cold water streams shall retain the natural stream channel except within 300 feet of the structure and shall not back up water during normal base flow.

b. Aids will not be approved where wet pools or impoundments back waters over a state class A or B trout stream. Approval of aids for impoundments on class C trout streams may be given only if alternate sites on warm water streams have been determined nonfeasible.

c. If a dam is constructed on a cold water stream, it shall have a dry sediment pool. The conduit through the dam shall be straight through without obstruction and designed to carry base flow with a velocity of not less than 1.5 fs. and not to exceed 4.0 fs. A cuneate will be installed in the flume to maintain a minimum water depth of 4 inches. The fall from the flume outlet to the surface of the stilling basin shall not be less than 12 inches nor more than 24 inches.

2. Warm water streams. Wet sediment pools are desirable on warm water streams provided valuable wildlife habitat or aesthetic features are not destroyed.

3. Multiple use structures. The design shall provide for a full bottom drain to be utilized for management, and a cold water draw (variable if possible) to carry full base flow.

4. Damage to habitat. Any damages to the water, fish or game resources shall be mitigated and planned for in the project plan.

History: Cr. Register, January, 1972, No. 193, eff. 2-1-72.

NR 50.09 Administration of recreation site planning grants. Applications may be submitted by any county, town, city or village for grants of not more than 50% of the cost to develop site plans for outdoor recreation facilities and reimbursement will be after the plans are completed upon incorporation in an approved development agreement or program.

History: Cr. Register, January, 1972, No. 193, eff. 2-1-72.

NR 50.10 Administration of aids for counties for snowmobile trails and areas. Sections 23.09 (11) and (26) and chapter 350, Wis. Stats.

(1) ELIGIBLE ITEMS:

(a) Purchase of easements or leases over private property for snowmobile trails, facilities and areas, if such easements provide public access to the trail, facility or area. No lands or easements may be acquired under condemnation. Property appraisals shall be based on department standards and property appraisal reports shall be approved by the department.

(b) Enter into agreements with the department to use for snowmobile trails, facilities or areas on lands owned or leased by the department. No lands will be condemned for this purpose.

(c) Develop and maintain snowmobile trails, facilities and areas on public lands designated by the county board or trails or areas under paragraphs (a) (b). The amount of aids to be granted to develop leased lands will be commensurate with the duration of lease.

Register, March, 1973, No. 207

252f

(2) PROCEDURE FOR APPLYING FOR GRANT:

(a) Submit snowmobile plan approved by regional planning commission and compatible with state plans.

(b) Submit resolution adopted by the county board containing the following:

1. Applications for any or all:

a. Grants for purchase of easements, leases, or lands.

b. Grants for cost of developed trails and facilities.

c. Grants to maintain trails.

2. Name agency of county authorized to sign forms and act in behalf of county.

3. That the county will maintain the trails and facilities.

4. That county crews may do the work in excess of \$1,000.

5. Indicate funds budgeted for county share of lease, easement or land purchase and for maintenance of trails.

(c) Submit application forms, maps, data and follow procedures outlined in outdoor recreation aid program guide.

(d) Submit an environmental impact assessment or environmental impact statement.

(3) SNOWMOBILE TRAIL DESIGN AND CONSTRUCTION SPECIFICATIONS:

(a) Required specifications:

1. Permanent trails:

a. Minimum graded width for one-way trails is 6 feet and maximum about 8 feet.

b. Minimum graded width for two-way trails is 10 feet and maximum about 12 feet.

c. Minimum turning radius is 25 feet.

d. A height of 10 feet above the trail will be cleared.

e. Sustained grades and slopes will be a maximum of 25%.

f. Brush will be cleared from an area 2 feet outside the trail edge.

g. Reflectorized signs or nonreflectorized signs.

2. Trails constructed with short term easements:

a. Minimum graded width of one-way trails is 4 feet and maximum width about 8 feet.

b. Minimum graded width of two-way trails is 8 feet and maximum about 12 feet.

c. Reflectorized or nonreflectorized signs.

d. Trail blazers, directional arrows, stop, regulatory, warning signs and highway guide signs may be used.

(b) Desirable specifications:

1. Trail length of 15-30 miles is desirable, 40-50 miles maximum, 5-10 miles minimum.

2. Toilet facilities should be provided at about 15-mile intervals on heavily used trails and recreation areas.

3. Trail vertical and horizontal sight distance should be a minimum of 50 feet. Snowbanks at road crossings should be cut back to provide adequate visibility in both directions on both sides. Snowbanks should be kept low at trail crossing points to permit easy exit from and entrance back on to the trail. Warning signs should be installed on trails at both trail and road crossings.

4. Approaches and exits to grades and slopes should be straight, at least as long as the slope, grades and hill crossings should be wider than the normal trails.

5. Access to trails should be controlled where possible. Caution signs

should be used to indicate trail intersections. Trails should be routed away from areas that will attract undesirable traffic or uses. Emergency exits should be provided at about 5-mile intervals and shown by trail signing.

6. Topography and land characteristics should be varied to maintain user interest, and to take advantage of interesting features.

7. Occasional open areas should be provided for frolic and rest.

8. Trail maintenance is extremely important to improve trail usability and enjoyment. Constant dragging of the trail is needed to eliminate moguls (humps). Ideally, heavily used trails should be dragged immediately after each new snowfall. Once-a-week maintenance is recommended.

9. Snowmobile trails should not be routed over lakes, streams or other bodies of water. If stream crossings are necessary, provide bridges at least 6 feet wide. Permits may be required on navigable streams.

10. Trails should cross contours at right angles where possible. Routing trails along side slopes should be avoided.

11. Route trails away from areas designated in department wilderness policy, game preserves, winter browse areas, experimental stations, nurseries, plantations and other areas of anticipated conflict, particularly areas which may be damaged by trail development or snowmobile use.

12. Trash barrels and picnic facilities should be provided at all rest and other use areas.

(4) SNOWMOBILE TRAIL SIGN STANDARDS:

(a) Snowmobile trail, regulatory, warning, guide and informational signs.

Signs for use on snowmobile trails to regulate snowmobile traffic, warn snowmobile drivers or assist the snowmobile driver to reach his destination.



TRAIL BLAZER

Purpose: to delineate the trail and to reassure the user that he is on the trail.

Size: 5" x 7" or 6" x 6" Color: Reflective orange with black border. A limited number of 9" x 9"

blazers may be used where needed.

Register, March, 1973, No. 207



DIRECTIONAL ARROW SIGN

Purpose: Indicates trail direction or changes in trail direction. Size: 9¼" x 12", 9" x 9" or 12" x 12" Color: Reflective or ange background with black arrow and border. Legend: 5¼" directional arrow.



STOP SIGN Purpose: Use on trail prior to road

crossing. Size: 12" x 12" or 18" x 18" Color: Reflective red background and reflective white letters and border. Legend: 12" x 12" size—4" upper case letters, 18" x 18" size—6" upper case letters.



REGULATORY SIGN Purpose: To inform snowmobile driver of regulations. Size: 12" x 18" Color: Reflective white background and black letters and border.



WARNING SIGNS Purpose: To warn snowmobile driver of hazard. Size: 12" x 12" Color: Reflective yellow background and black letters or legend.



DO NOT ENTER SIGN Purpose: To indicate one way trail or restricted area. Size: 12" x 12" with 2½" letters. Color: Reflective red background with white letters, border and legend.



PERMISSIVE

Purpose: To indicate snowmobile trails and other areas where snowmobiling is permitted.

Size: 12" x 12"

Background Color: Reflective white. Legend: Reflective green circle. Black snowmobile symbol.



GUIDE SIGN Purpose: Directs snowmobile driver to his destination. Color: Brown background with reflec-

tive white letters and legend. Legend: 2½" upper case letters.



INFORMATIONAL SIGN

Purpose: Furnish information about trails or facilities.

Color: Painted or stained brown background with painted or routed white letters. Legend: Maps.

Register, March, 1973, No. 207



RESTRICTIVE

Purpose: To indicate areas where snowmobiling is not permitted. Size: 12" x 12" Background Color: Reflective white. Legend: Reflective red circle. Black snowmobile symbol.



SNOWMOBILE TRAIL SYMBOL

Purpose: Indicates snowmobile trail where trail intersects highways. Size: 13" x 10½" Color: Reflective orange with black letters and symbol.



HIGHWAY GUIDE SIGN

Purpose: Inform auto driver of location of snowmobile trail or route. Color: Brown background with painted reflective white letters and legend.

252j



DIRECTIONAL ARROW SIGNS AND TRAIL BLAZERS MAY BE MOUNTED ON 2"x2" WOOD OR STEEL "U" POSTS.

SIGN PLACEMENT

(b) Snowmobile trail and highway signs shall conform with sign legend and colors listed in Wisconsin Manual of Traffic Control Devices. Signs used on highways shall be reflectorized and constructed to the minimum specifications of the standard intersection signing listed in the Wisconsin Manual of Traffic Control Devices. The reflective material shall meet the specifications of paragraph 637.2.2.1 on reflective sheeting of Wisconsin Division of Highways standard specifications for road and bridge construction, edition of 1969.

(5) SNOWMOBILE ROUTE SIGN STANDARDS:

(a) Snowmobile route signs. Signs for use on highways and sidewalks designated for use by snowmobile operators by the governmental agency having jurisdiction or authorized by chapter 350.04, Wis. Stats., are as follows:

1. The Snowmobile Route (D11-6) sign shall have a reflectorized white symbol, margin and message on a reflectorized green background. The standard and minimum size of this sign is $24'' \ge 18''$. The design of the stylized snowmobile symbol and the word message "SNOWMOBILE ROUTE" shall essentially conform to the standard design on file in the division of highways, department of transportation. A Cardinal Direction marker (North, South, East or West) and the END marker with reflectorized white letters and margin on reflectorized green background may be used with the Snowmobile Route sign if appropriate. The standard and minimum size of such markers is $24'' \ge 12''$.

When a Snowmobile Route has a name and it is desirable to use that name on the signs to distinguish one Snowmobile Route from another, not more than two additional lines of message may be added to the Snowmobile Route sign above the symbol. The standard and minimum size of such route signs is 24" x 24".

2. A Directional Arrow marker having a reflectorized white arrow and margin on a reflectorized green background shall be used with the Snowmobile Route marker exceept when it is used just beyond a turn or a Reassurance marker. The standard and minimum size of the Directional Arrow marker is $24'' \ge 6''$, and the arrow shall have a length of $15\frac{1}{2}''$ and a stem $1\frac{1}{2}''$ wide.

When required by special conditions, a supplemental panel of the same width as the Snowmobile Route Sign may be mounted below that sign to post supplementary guidance or regulatory information. This sign shall have white letters and border on a green background if it is a guide sign, and shall have the same background and a message color combination as for the appropriate regulatory sign if of that type. The message and color combination shall have the approval of the authority in charge of the maintenance of the highway.

3. A Snowmobile Route sign with appropriate Directional Arrow shall be placed at the beginning of a Snowmobile Route and at such locations and intervals as are necessary to enable snowmobile operators to follow the route. Excessive signing should be avoided.

4. At intersections where a snowmobile route turns a Snowmobile Route sign with Directional Arrow marker pointing in the appropriate direction shall be placed, at or just in advance of the point of turn. It may be desirable in some cases to place a Snowmobile Route sign without Directional Arrow a hundred feet more or less beyond the intersection or point of turn to reassure snowmobile operators that they are on the Snowmobile Route.

5. White on brown guide signs, as specified under Snowmobile Trail signing, may be used to designate the junction of a Snowmobile Route with a Snowmobile Trail.

6. Separate STOP signs and other regulatory and warning signs for snowmobile operators are not considered normally to be necessary on a Snowmobile Route since those provided for highway traffic should suffice. However, where such special signing is done for snowmobile operators, the sign specified for Snowmobile Trails shall be used, and they shall be so placed and positioned as not to confuse drivers of vehicles on the highway.

7. All Snowmobile Route signing shall be done by or under the direction of and is the responsibility of the unit of government which designates the Snowmobile Routes. The department of transportation does not participate in Snowmobile Route signing but reserves the right to require such changes in the signing of Snowmobile Routes marked over the State Trunk Highway System as it deems necessary in the safety of highway traffic and the efficient and effective operation of the highway.

8. All Snowmobile Route signing shall insofar as practicable be placed between the path intended for snowmobile use and the edge of the highway right-of-way. In no case shall Snowmobile Route signing be closer than two (2) feet to the outer edge of the highway shoulder. Snowmobile Route signs should be placed on wood or light weight metal supports which will readily break or bend without injuring the occupants if hit by a vehicle or snowmobile.

9. Snowmobile Route signs shall not be erected on highway rightof-way until permission therefore has been received from the authority in charge of the maintenance of the highway.

(b) *Reflectorization*. The reflective material for all reflectorized signs shall meet the specifications of paragraph 637.2.2.1 on reflective sheeting in the State of Wisconsin division of highways standard specifications for road and bridge construction, edition of 1969.

Register, March, 1973, No. 207

2521

DEPARTMENT OF NATURAL RESOURCES 252m



(

ĺ

GREEN-REFLECTORIZED BACKGROUND WITH WHITE-REFLECTORIZED LETTERS AND SYMBOLS

SNOWMOBILE ROUTE SIGN

History: Cr. Register, January, 1972, No. 193, eff. 2-1-72; r. and recr. Register, March, 1973, No. 207, eff. 4-1-73.