

FEASIBILITY STATEMENTS FOR WHITE-TAILED DEER GOALS AND OBJECTIVES

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For Wildlife Management Districts 1-11 (Northern Maine)

Short-term Goal: Provide hunting and viewing opportunity for white-tailed deer, while preventing over-browsing of deer wintering habitat.

Short-term Objective: Bring the deer population to 50 to 60% of the carrying capacity of the wintering habitat by the year 2004, then maintain at that level.

Long-term Goal: Increase hunting and viewing opportunity for white-tailed deer by increasing deer wintering habitat to potentially support 10 deer /mi² on summer range.

Long-term Objective: Increase deer wintering habitat to 8% of the land base to ensure sufficient wintering habitat to accommodate a post hunt population of 10 deer/mi² by the year 2030 (or sooner), and then maintain as for the short-term objective.

The two-tiered goal and objective statements recognizes that availability of wintering habitat is the primary obstacle to increasing deer populations on a sustainable basis. Winters are characteristically severe for deer in these WMDs. As a result, deer are highly dependent on wintering habitat for survival nearly every year.

Desirability: There is widespread support for increasing the deer population in WMDs 1-11. Deer hunting is an important component of the rural economy of northern and western Maine. During the past 20 years, there has been an egress of hunters from this part of the state, largely in response to declining deer populations. Over the long term, restoration of deer populations could attract more deer hunters and watchers to WMDs 1-11.

Feasibility: Attainment of short-term goals can readily be accomplished using the Any-Deer permit system. However, we may find it difficult gaining hunter support for the doe harvests necessary to stabilize deer populations at their current low densities.

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To attain the long-term goal of 10 deer /mi² on summer range, deer populations would be increased by 1.5 to 5x current densities on summer range (Table 18). This would require a corresponding increase in the quantity of wintering habitat. Accomplishment of this goal will require a substantial Department commitment to find socially acceptable ways of protecting and enhancing deer wintering habitat. Since most of this habitat is privately or corporately owned, landowner support for the deer wintering habitat program is essential to its success (this applies statewide).

Since spruce-fir inventory is expected to decline for another 10 years, the deer wintering area program must overcome the increased demand for spruce-fir timber products over the next several decades. We are likely to experience a net loss of deer wintering areas statewide during the next decade. After that time, re-growth of spruce fir forests should accelerate, providing an opportunity to increase our wintering habitat base. If winters continue to moderate, effects of this wintering habitat loss should be less of an obstacle to maintaining the current deer population.

Capability of Habitat: Attainment of short-term goals of maintaining the deer herd "in balance" with existing wintering habitat implies limiting deer density at 50 to 60% of the carrying capacity of deer wintering habitat. Using antler beam diameter of yearling bucks as a guide, deer populations in WMDs 7 to 10 are already at this target carrying capacity (Table 18), while deer in WMDs 1 to 6 and WMD 11 are still below this level. However, we are uncertain if yearling buck antler size is an adequate index to winter carrying capacity, particularly where winters are very severe (WMDs 1-6).

During recent winters, regional biologists have noted heavy browsing, including bark stripping in several major DWAs. In some locations, deer are using hardwood-dominated stands in the periphery of major DWAs during deep snow conditions, to a greater extent than they formerly did. Both the heavy browsing, and use of hardwood sites during recent severe winters suggests deer in WMDs 1-6 may also be at or above 50 to 60% of the carrying capacity of deer wintering areas. Beginning in 1998, we initiated doe harvests designed to stabilize deer populations in WMDs 1 to 11. This management strategy will likely continue, unless research on the relationship of northern Maine deer to winter carrying capacity indicates other strategies (e.g., increasing or decreasing herd size) should be pursued. We also recognize that browsing by locally abundant moose populations near major DWAs between May and December may negatively affect forage availability to deer in these wintering habitats.

Given current wintering conditions, a population of 10 deer /mi² on summer range in WMDs 1-11 would require nearly 780,000 acres (1,217 mi²) of deer wintering habitat (Table 7), or 7.8% of the area of these WMDs. The current known area of deer wintering habitat in WMDs 1 to 11 is 258,600 acres (404 mi²), or 2.6% of the

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area of these WMDs. Hence, attaining the long-term deer population goals in northern and western Maine may require an additional one-half million acres of deer wintering habitat. Prior to the mid 1970's, deer wintering habitat comprised 10 to 12% of the area of northern and western Maine.

Since summer range can support >60 deer /mi² at K in WMDs 1-11, deer populations at proposed long-term goal of 10 /mi² would not negatively impact vegetation, and individual deer would remain in excellent reproductive and physiological condition.

Possible Consequences: Attainment of the short-term goal will result in increased opportunity for harvest of antlerless deer, as populations are stabilized. However, continued loss of wintering habitat over the next decade will result in lower deer populations and harvests.

Harvests of antlerless deer would not be warranted when abnormally severe wintering conditions occur in northern and western WMDs. In northern WMDs, doe harvest regulation alone may not fully counteract high winter losses following severe winters. Populations will still decline, although not to the same degree as when doe harvests are not curtailed.

If long-term population goals are achieved, allowable harvests in WMDs 1-11 would be substantially higher than is currently possible (Table 18). Deer harvest to stabilize populations of 10 deer /mi² in WMDs 1 to 11 would approximate 12,400 deer /year compared to 5,500 deer harvested /year (or less) currently. Projected harvests at goal attainment may prove to be conservative. If improved quantity and quality of wintering habitat results in better over-winter survival, harvest necessary to stabilize the herd will be correspondingly higher.

Attainment of long-term population goals in northern and western Maine would result in increased hunting success rate (Tables 6 and 18). Projected success rates, when the deer population is 10 deer /mi², are unrealistically high for heavily wooded habitats in Maine. A reasonable estimate for hunter success in these WMDs would be roughly 25%. If winter habitat was increased to proposed levels, a net increase in hunting effort or predation would be required to stabilize deer populations at 10 deer /mi² in WMDs 1-11.

When at goal (10 deer /mi²), deer density may be at the threshold where transmission of brainworm to moose occurs more regularly. This may affect natural mortality rate of moose, and therefore, allowable moose harvest. In addition, maintaining a greater proportion of WMDs 1-11 in mature coniferous forest would adversely affect overall carrying capacity for moose. Higher deer populations, when at goal, would also impact browse available to moose and hare.

For Wildlife Management Districts 12, 13, 14 and 18 (Western Mountain Foothills)

Short-term Goal: Provide hunting and viewing opportunity for white-tailed deer, while preventing over-browsing of deer wintering habitat.

Short-term Objective: Bring the deer population to 50 to 60% of the carrying capacity of the wintering habitat by the year 2004, then maintain at that level.

Long-term Goal: Increase hunting and viewing opportunity for white-tailed deer, while preventing over-browsing of deer wintering habitat.

Long-term Objective: Increase deer wintering habitat to 9 to 10% of the land base to ensure sufficient wintering habitat to accommodate a post hunt population of 15 deer/mi² (when on summer range) by the year 2030 (or sooner), and then maintain as for the short-term objective.

Desirability: Comments similar to previous section.

Feasibility: As with more northerly WMDs, attainment of the short-term goal can readily be accomplished by regulating the antlerless deer harvest. Attainment of the long-term goal would require an increase in deer population by 1.15 to 2x among the 4 WMDs (Table 18).

Capability of Habitat: Current deer populations in WMDs 12 to 14 and 18 range from 8 to 13 deer /mi² (Table 18). Based on yearling antler size, deer populations in each of these WMDs is currently between 50 and 60% of Maximum Supportable Population (MSP). Winters in these WMDs are shorter and less severe than more northerly WMDs. Because winters are typically less severe, higher deer densities can be sustained in wintering habitat (Table 7). This allows us to manage for a higher, long-term summer density in WMDs 12 to 14 and 18 than would be possible in the north. Since the carrying capacity of summer range exceeds 60 deer /mi², attainment of 15 deer /mi² on summer range in these WMDs would not negatively impact vegetation or deer productivity and physiological condition.

Attainment of long-term goals in WMDs 12 to 14 and 18 would require nearly 220,000 acres (337 mi²) of wintering habitat, or 9.4% of the landbase in these WMDs (Table 18). Historical quantity of deer wintering habitat approximated 10 to 15% of the landbase in this part of the state. Current inventory of deer wintering habitat in these WMDs is incomplete, particularly for WMD 14. Current known inventory of deer wintering habitat in these WMDs is roughly 94,000 acres or 4.1% of the landbase.

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Possible Consequences: Attainment of short-term goals would result in a slight increase in antlerless harvest, as doe harvests are increased to stabilize populations at current density.

When long-term goals are attained, allowable deer harvest would approximate 5,750 deer, which is substantially higher than current (1997) harvests (3,500 deer; Table 18). As with northern WMDs, deer harvests which stabilize the deer population at 15 deer /mi² in WMDs 12 to 14 and 18 may be higher than projections given in Tables 6 and 18, if attainment of high quality wintering habitat results in improved over-winter survival of deer.

Projected hunter success rates when long-term population goals are reached (Table 18) for WMDs 12 to 14 and 18 are unrealistically high (i.e., >25%), suggesting a net increase in hunters (or predation) would be required to stabilize deer populations at 15 /mi².

Comments pertaining to competition with moose (see WMDs 1-11) apply here as well.

For Wildlife Management Districts 19, 27, 28, and 29 (Downeast Maine)

Short-term goal: Provide hunting and viewing opportunity for white-tailed deer, while preventing over-browsing of deer wintering habitat.

Short-term Objective: Bring the deer population to 50 to 60% of the carrying capacity of the wintering habitat by the year 2004, then maintain at that level.

Long-term goal: Increase hunting and viewing opportunity for white-tailed deer, while preventing over-browsing of deer wintering habitat.

Long-term Objective: Increase deer wintering habitat to 9 to 10% of the land base to ensure sufficient wintering habitat to accommodate a post hunt population of 15 deer/mi² (when on summer range) by the year 2030 (or sooner), and then maintain as for the short-term objective.

Desirability: Deer populations in the Downeast region have dropped dramatically since peak abundance in the late 1940's. As deer populations decreased, hunters shifted to more favorable parts of the state. The Downeast economy is highly dependent on its natural resources. The added revenue that improved hunting opportunity would bring to this area of the state would be highly valued. Hence, increasing deer populations in WMDs 19, 27, 28 and 29 is highly desirable.

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Feasibility: Attainment of the short-term goal would require an increase in the deer population in WMDs 19, 27, 28, and 29. Although the quantity of available wintering habitat is far below what was available prior to 1975, current deer populations in these WMDs appear to be below what the current inventory of wintering habitat can support. Increasing local deer populations in this area will require a reduction in adult doe annual losses, and/or an increase in early survival of fawns (recruitment). Since these WMDs already have been subjected to bucks-only hunting since 1983, improving doe or fawn survival cannot be achieved by regulating the legal harvest alone. Successful attainment of the short-term goal in WMDs 19, 27, 28, and 29 may require achieving a significant reduction in illegal kill, road-kill, predation on adult does, and predation on young fawns. Since the relative importance of the above mortality factors is unknown, it is difficult to predict how much effort at reducing these losses will result in a positive response in the deer population.

Capability of the Habitat: Based on the antler development of yearling bucks, deer in WMDs 19, 27, 28, and 29 are currently below MSP (Table 18). Hence, current wintering habitat can accommodate more deer. Although we are not closely monitoring browsing trends in Downeast DWAs, we generally have not noted examples of excessive browsing or bark stripping there. Moreover, winters are typically mild in this part of the state; recently they have been below average in severity. Severe winters occur only once or twice per decade.

To attain the long-term goal of 15 deer per mi^2 , deer populations would be 2 to 5x current population density on summer range (Table 18). Since the summer range in WMDs 19, 27, 28, and 29 can support at least 60 deer / mi^2 (at summer K), attainment of the long-term population goal would not negatively impact vegetation, or deer productivity and physiological condition.

Attainment of the long-term population goal would require nearly 200,000 acres (309 mi^2) of deer wintering habitat, or 9.4% of the landbase of WMDs 19, 27, 28, and 29. Current inventory of deer wintering habitat is among the lowest in the state: about 33,000 acres (51 mi^2) or 1.5% of the landbase. Prior to 1975, deer wintering habitat comprised 10 to 15% of the landbase Downeast.

Possible Consequences: Large-scale efforts to reduce deer losses to predation will be met with opposition from stakeholders who oppose predator control.

Attainment of the short-term goal will result in higher deer harvest and hunting opportunity. Potential harvest, when the long-term goal is achieved, would be dramatically higher (4,500 deer) than current deer harvests (1,450 deer; Table 18). As with other WMDs, potential harvests will be higher than those projected in Table 18, if wintering habitat quality improves along with wintering habitat quantity. Comments pertaining to competition with moose (see WMDs 1-11) apply here as well.

For Wildlife Management Districts 16, 17, 22, 23, and 26 (Central Maine)

Goal: Balance the desire for deer hunting and viewing opportunity with the need to reduce negative impacts of deer from browsing damage, collisions with motor vehicles, and potential risk of Lyme disease.

Objective: Bring the post hunt deer population to 20 deer/mi² (or no higher than 60% of Maximum Supportable Population) by 2004, then maintain.

Desirability: Deer populations are thriving in central Maine. Since 1983, deer populations have responded to reduced doe harvests and mild to moderate wintering conditions, enabling significant progress toward achieving population objectives set in 1985 (deer population at 50 to 60% of MSP).

Deer in WMDs 16, 17, 22, 23, and 26 accommodate a significant amount of hunting opportunity. Deer harvests are now higher in these central Maine WMDs than during most former decades this century.

As the deer population increased in these districts, so too did concerns regarding increased road-kills, crop damage, excessive browsing of ornamental plantings, and risk of humans contracting Lyme disease. Note: Human cases of Lyme disease are currently non-existent or very rare in these WMDs. Although the most serious negative impacts of the central Maine deer population are occurring where hunting access is limited and deer are more abundant, central Maine deer populations may soon increase to the point where nuisance complaints are more numerous and widespread.

The population objectives selected for WMDs 16, 17, 22, 23, and 26 reflect a desire to accommodate a substantial demand for deer hunting while holding nuisance complaints within reasonable bounds.

Feasibility: Attainment of the population goal for central Maine WMDs will require stabilizing or reducing current populations (Table 18). Since deer populations have continued to increase since 1997, herd reductions probably will be necessary to achieve the goal in all central Maine WMDs. This will require substantial allocations of Any-Deer permits. Whether or not we will be successful at reducing local deer populations to desired densities will depend upon hunter willingness to kill antlerless deer, and upon sufficient access to hunt deer. Landowner willingness to accommodate hunting is essential to controlling deer population growth in WMDs 16, 17, 22, 23, and 26 (this applies statewide).

Capability of Habitat: Attainment of 20 deer per mi² in central Maine WMDs would keep the herd below 50% of MSP (Table 18). Existing wintering habitat can easily accommodate this population, given prevailing mild winters. However, current

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wintering habitat may be insufficient to accommodate this population during severe winters (once per decade when our Winter Severity Index exceeds 70). Winter habitat selection by deer in central and southern Maine is poorly understood. Applying winter habitat standards developed for deer in northern WMDs to southern Maine WMDs may result in an under-estimate of winter habitat actually used by deer.

Possible Consequences: Initially, antlerless deer harvests in WMDs 16, 17, 22, 23, and 26 will increase substantially, as deer populations are stabilized or reduced to 20 deer /mi². For the past 15 years, doe harvests have been curtailed to promote slow population growth. However, deer harvests needed to maintain deer at 20 /mi² at goal in central Maine WMDs (16,050) will be slightly less than current (1997) harvests (17,600 deer; Table 18). This would be true for antlered bucks as well as antlerless deer. Since deer populations in central Maine WMDs would be held below 50% of MSP, harvests generally will be less than maximum sustained yield.

Overall deer harvests in central Maine WMDs could be increased while at goal densities if previously under-hunted land becomes available for harvest. Hence, programs designed to improve hunter access can contribute to satisfying the demand for hunting opportunity, while simultaneously reducing nuisance deer populations and increasing the deer harvest.

When the proposed population goals are achieved for central and southern Maine, we expect a slightly lower deer harvest. Although fewer deer will be harvested, hunter success rates will increase during the next 15 years, if trends in hunter participation continue to decline.

For Wildlife Management Districts 15, 20, 21, 24, 25, and 30 (Southern and Coastal Maine)

Goal: Balance the desire for hunting and viewing opportunity with the need to reduce negative impacts of deer from browsing damage, collisions with motor vehicles, and potential risk of Lyme disease.

Objective: Bring the post hunt deer population to 15 deer/mi² (or no higher than 60% of Maximum Supportable Population) by 2004, then maintain.

Desirability: Southern and coastal WMDs support Maine's highest human population densities. During the past 30 years, residential sprawl in this part of the state has significantly impacted our ability to access and control local deer populations. Deer habitat in WMDs 15, 20, 21, 24, 25, and 30 is a highly heterogeneous patchwork, within which deer densities range from <10 deer /mi² to 100 or more deer /mi². Both deer density, and the level of negative impacts from

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deer browsing, road-kill, and Lyme disease risk are inversely related to deer hunting access. From the standpoint of minimizing negative impacts of deer, attainment of the population goal of 15 deer /mi² throughout WMDs 15, 20, 21, 24, 25, and 30 is highly desirable.

Feasibility: Attaining the goal of 15 deer /mi² in southern and coastal Maine WMDs would require dramatically higher deer harvests over a number of years in those areas which are now under-hunted or un-hunted. Gaining hunting access for the purpose of deer removal and population reduction will require a great deal of cooperation between the Department, municipalities, individual landowners, and hunters. Overcoming negative perceptions about hunters and killing of deer will be a necessary, but difficult task in southern Maine. In some instances, legislation would be required to legalize deer hunting on several islands and mainland sanctuaries that have been closed to deer hunting since the early part of this century.

Capability of Habitat: Deer in localized parts of WMDs 20, 21, 24, 25, and 30 are near the maximum supportable population, i.e. 100 deer /mi². Attainment of the goal of 15 deer /mi² would ensure that the population throughout southern and coastal Maine remains well below carrying capacity.

Winters are rarely severe in this part of Maine. When a severe winter occurs, existing wintering habitat would not be sufficient to accommodate the current population. Hence, winter losses would be high throughout the area.

Possible Consequences: Achievement of the population goal would minimize human conflicts with deer, particularly in those parts of WMDs 15, 20, 21, 24, 25, and 30 where deer populations are now excessive.

Failure to gain support for deer population regulation by hunting (controlled or recreational) will lead to increased demands for more expensive (and in some cases, less effective) non-traditional methods of deer population control (e.g., trap and transplant, sharpshooting, fertility control). Projected estimates of deer harvest for southern Maine WMDs when at goal vs. current harvest (Table 18) significantly under-estimates true harvest potential. Harvest estimates presented in Table 18 do not include the deer harvest that would become available when previously closed land is open to hunting, nor does it include the substantial deer harvest necessary to bring deer density from 50 to 100 deer /mi² down (over time) to 15 deer /mi². Similarly, estimates of deer hunting success in WMDs 20, 21, 24, 25, and 30 are biased low.

There is a danger, when allocating increased hunting opportunity, that buck quality will be adversely impacted, and deer populations will decline in areas where hunting access is patchy. Allocating greater numbers of Any-Deer permits to control deer on 1,000 mi², when only 250 mi² is open to deer hunting, will result in over-harvest

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on huntable land, while failing to impact deer over the larger, inaccessible area. This may already be occurring in WMDs 20, 21, and 24.

Statewide Overview

Attainment of proposed deer population (long-term) goals in each of Maine's 30 WMDs would result in a deer population which is within 15 to 55% of maximum supportable populations, and would approximate a wintering herd of nearly 384,000 deer, or 13 /mi². Allowable deer harvest at target population would exceed 46,000 deer annually. Hunting success would exceed 20% in all WMDs, and a net increase in deer hunters would be required to achieve desired harvests in northern and eastern WMDs. Wintering habitat requirements for the 384,000 wintering deer would be approximately 1.7 million acres, or 9.1% of the landbase, overall.

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Deer population, harvest, and hunter success objectives to be achieved in Maine by 2030, by Wildlife Management Districts.

Management District	Population Target (% of MSP) ^a	Wintering Population Size at Target ^b		Allowable Harvest ^c At Target	Potential Hunting Success % At Target
		Number	Number/Mi ²		
	55	14,150	10	1,100	64
	55	11,750	10	900	59
	55	9,300	10	800	25
	55	19,600	10	1,350	51
	55	15,450	10	950	37
	55	13,800	10	1,350	23
	55	13,650	10	1,100	43
	55	20,400	10	1,800	36
	55	9,500	10	850	33
	55	8,850	10	850	28
	55	16,650	10	1,450	25
	55	14,050	15	1,450	38
	55	8,500	15	900	38
	55	11,900	15	1,250	37
	48	14,950	15	2,300	26
	50	14,350	20	2,450	28
	43	27,250	20	4,500	29
	55	19,500	15	2,150	26
	55	17,500	15	1,650	38
	62	9,000	15	2,100	23
	51	7,300	15	1,850	24
	44	10,400	20	2,100	26
	32	18,250	20	3,050	25
	25	4,150	15	1,050	24
	49	7,250	15	1,400	20
	43	11,150	18	1,650	25
	55	12,250	15	1,350	34
	55	12,400	15	1,100	51
	55	7,300	15	650	41
	15	3,000	15	1,200	50
Statewide Total		383,550	13	46,650	30

^a Maximum Supportable Population, ie. the maximum number of deer that can survive in that WMD, given the amount of wintering habitat available.

^b Area of deer habitat in WMD will be same as area in 1997.

^c Harvest among antlerless deer is that number which stabilizes the population when at current density, given current rates of hunting effort for bucks. Hunter density approximates those listed in Table 17. Success rates above 25% are probably not feasible. WMDs with potential success rates are subject to influx of hunters to achieve harvest potential.

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ount of wintering habitat required to support target population objectives, by Wildlife Management Districts in Maine, by 2030.

District	Target Wintering Population ^a		Optimum Stocking in Wintering Habitat		Projected Wintering Conditions ^b			Wintering Habitat Required	
	Number of Deer	Deer/Mi ² Habitat	Deer-Days Use	Maximum Wintering Density (Deer / mi ²)	WSI	Yarding Period (Days)	Acres/Deer	Total Acres	Total Mi ²
	14,150	10	15,000	110	88	135	5.8	82,070	12,000
	11,750	10	15,000	120	87	125	5.3	62,275	9,000
	9,300	10	15,000	125	84	120	5.1	47,430	7,000
	19,600	10	15,000	110	85	135	5.8	113,680	17,000
	15,450	10	15,000	125	79	120	5.1	78,795	12,000
	13,800	10	15,000	125	79	120	5.1	70,380	11,000
	13,650	10	15,000	135	73	110	4.7	64,155	10,000
	20,400	10	15,000	120	79	125	5.3	108,120	16,000
	9,500	10	15,000	140	71	105	4.5	42,750	6,000
	8,850	10	15,000	160	70	100	4.3	38,055	5,000
	16,650	10	15,000	160	70	100	4.3	71,595	11,000
	14,050	15	15,000	160	70	100	4.0	56,200	8,000
	8,500	15	15,000	160	70	100	4.0	34,000	5,000
	11,900	15	15,000	160	70	100	4.0	47,600	7,000
	14,950	15	15,000	160	70	100	4.0	59,800	9,000
	14,350	20	15,000	160	70	100	4.0	57,400	9,000
	27,250	20	15,000	160	70	100	4.0	109,000	17,000
	19,500	15	15,000	160	70	100	4.0	78,000	12,000
	17,500	15	15,000	160	70	100	4.0	70,000	10,000
	9,000	15	15,000	160	70	100	4.0	36,000	5,000
	7,300	15	15,000	160	70	100	4.0	29,200	4,000
	10,400	20	15,000	160	70	100	4.0	41,600	6,000
	18,250	20	15,000	160	70	100	4.0	73,000	11,000
	4,150	15	15,000	160	70	100	4.0	16,600	2,000
	7,250	15	15,000	160	70	100	4.0	29,000	4,000
	11,150	18	15,000	160	70	100	4.0	44,600	7,000
	12,250	15	15,000	160	70	100	4.0	49,000	7,000
	12,400	15	15,000	160	70	100	4.0	49,600	7,000
	7,300	15	15,000	160	70	100	4.0	29,200	4,000
	3,000	15	15,000	160	70	100	4.0	12,000	1,000
Total	383,550	13						1,700,000	2,650,000

to be achieved and maintained by the year 2030, as set forth in Table 6.

1 to 11, assumes winters between 1999 and 2030 will average the same level of severity as those from 1980-98. For WMDs 12 to 30, assumed an approximate WSI of 70 (moderate to severe conditions), thereby requiring sufficient winter carrying capacity for restrictive yarding conditions spanning 100 days. See Table 12.

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Table 18. Summary of objective vs. current deer population, wintering habitat, harvest, and hunter success.

Wildlife Management District	Percent of MSP		Wintering Deer /mi ²		Wintering Habitat (% of WMD)		Harvest to Stabilize		Hunter Success Rate %	
	Current 1997	Target	Current 1997	Target	Current Known	Target Required	Current 1997	Target	Current 1990-96	Potential
1	42	55	5.7	10	3.0	9.0	651	1,100	26	64
2	47	55	2.6	10	2.2	8.2	218	900	11	59
3	36	55	1.8	10	1.8	7.9	129	800	3	25
4	43	55	4.6	10	1.9	9.1	543	1,350	18	51
5	45	55	7.0	10	2.6	8.0	641	950	17	37
6	31	55	3.1	10	1.4	8.0	438	1,250	4	23
7	55	55	7.3	10	2.9	7.3	789	1,100	24	43
8	51	55	5.1	10	2.1	8.3	762	1,800	14	36
9	56	55	2.9	10	2.1	7.1	236	850	8	33
10	57	55	3.9	10	3.2	6.7	330	850	8	28
11	43	55	5.5	10	5.5	6.7	829	1,450	12	25
12	58	55	10.1	15	2.4	9.4	943	1,450	16	38
13	50	55	13.3	15	3.3	9.4	817	900	23	38
14	52	55	8.0	15	1.1	9.3	610	1,250	16	37
15	53	48	16.2	15	3.2	9.3	2,485	2,300	18	26
16	48	50	19.2	20	9.5	12.5	2,335	2,450	16	28
17	48	43	22.0	20	8.7	12.5	4,904	4,500	21	29
18	51	55	7.8	15	7.4	9.4	1,158	2,150	9	26
19	42	55	2.7	15	1.2	9.3	236	1,650	4	38
20	45	62	10.6	15	5.1	9.3	1,519	2,100	12	23
21	47	51	13.9	15	4.7	9.4	1,780	1,850	15	24
22	44	44	19.8	20	10.8	12.5	2,250	2,100	13	26
23	47	32	25.8	20	14.2	12.5	3,902	3,050	19	25
24	45	25	27.5	15	1.9	9.4	2,027	1,050	25	24
25	41	49	12.6	15	9.5	9.3	1,221	1,400	9	20
26	47	43	19.6	18	5.7	11.3	1,720	1,650	12	25
27	47	55	9.0	15	1.9	9.4	737	1,350	10	34
28	44	55	3.9	15	2.0	9.4	250	1,100	5	51
29	41	55	5.0	15	1.0	9.4	212	650	5	41
30	UNK	UNK	UNK	15	UNK	UNK	UNK	1,200	UNK	50
Statewide	-	-	8.7		4.0	9.1	34,672	46,650	14	30

Success Rates above 25% are probably not feasible. WMDs with potential success >25% require an influx of hunters to achieve harvest potential.