Water & Soil Resources Board

Projects Summary (\$ in Thousands)

Project Title	2006 Agency Priority	Agency (\$ by Session)				Governor's Recommendations 2006	Governor's Planning Estimate	
	Ranking	2006	2008	2010	Total		2008	2010
RIM Reserve Program and CREP II	1	\$30,150	\$14,000	\$14,000	\$58,150	\$0	\$0	\$0
Local Government Road Wetland Replacement	2	4,200	4,683	4,998	13,881	0	0	0
Streambank, Lakeshore, Road Retention	3	5,260	5,260	5,260	15,780	0	0	0
Study Area II	4	500	0	0	500	0	0	0
Army Compatible Use Buffer (ACUB)	5	500	0	0	500	0	0	0
Grass Lake	6	2,200	0	0	2,200	0	0	0
Total Project Requests		\$42,810	\$23,943	\$24,258	\$91,011	\$0	\$0	\$0

RIM Reserve Program and CREP II

2006 STATE APPROPRIATION REQUEST: \$30,150,000

AGENCY PROJECT PRIORITY: 1 of 6

PROJECT LOCATION: Statewide for RIM; Southeast, Southwest, and

Northwest MN for CREP II

Project At A Glance

The Reinvest in Minnesota (RIM) Reserve and the Permanent Wetlands Preserve (PWP) programs compensate landowners for granting conservation easement to:

- Protect or retire marginal and environmentally sensitive agricultural lands
- Protect and enhance water quality of rivers, streams, and lakes
- Create fish and wildlife habitat
- Contribute toward a net gain of wetland resources
- Reduce flood damage through the creation of natural water retention systems.

Project Description

Degrading water quality and diminished habitats can be found throughout Minnesota. Approximately 2.5 million of the state's 23 million acres of cropland have been targeted as having more benefit to the state as retired cropland. The Reinvest in Minnesota (RIM) Reserve and the Permanent Wetlands Preserve (PWP) programs compensate landowners for granting conversation easements and establishing native vegetation habitat on these economically marginal, flood-prone, or highly erosionible lands.

The Board of Water and Soil Resources (BWSR) is requesting \$30.15 million in 2006 to purchase conservation easements on private land. Of the total amount, \$25.4 million is for easements and \$4.75 million is for implementation.

BWSR's RIM Reserve program is an important component of the state's efforts to improve water quality by reducing soil erosion and improving

wildlife habitat on private lands. RIM Reserve is implemented in cooperation with local Soil and Water Conservation Districts (SWCDs).

Damage to Minnesota resources occurs in the form of soil erosion, sedimentation of eroded soil, and phosphorus. Soil erosion reduces farm productivity, increases the costs of farming, and creates sediment for downstream communities to address. Sedimentation fills rivers and lakes, destroys habitat, carries pollutants, increases flood severities, and reduces recreational value. Phosphorus makes water unsuitable for fish or human activities, promotes excess aquatic plant growth, and promotes eutrophication of water resources.

Both the RIM Reserve and PWP programs meet the goals and objectives of BWSR's strategic plan. They protect the state's water and soil resources by retiring existing marginal agricultural lands, by restoring drained wetlands and by protecting existing wetlands that are highly susceptible to alteration. Agency goals that are achieved through capital projects include:

- Protecting or retiring marginal and highly sensitive agricultural lands;
- Targeting limited fiscal resources to highest priority natural resources;
- Allowing land managers to focus stewardship efforts on more productive and profitable lands;
- Creating natural retention systems to improve surface water quality and enhance groundwater recharge;
- Working toward a net gain of wetland resources; and
- Installing best management practices on Minnesota lands.

The state of Minnesota achieves quantifiable water quality benefits by removing this environmentally sensitive cropland from production. From 1998 to 2002, through BWSR's Local Government Annual Reporting System (LARS), with data reported by SWCDs, BWSR calculated the benefits at 9.6 tons/acre/year sediment reduction, 4.2 tons/acre/year soil loss reduction, and 5.3 pounds/acre/year reduction from each acre enrolled in a conservation easement.

Conservation Reserve Enhancement Program (CREP) II

In the Minnesota River CREP, Minnesota enrolled 2,445 easements totaling 100,000 acres of environmentally sensitive cropland at a cost to the state of \$81.4 million out of a total cost of \$244.4 million. Based on that success, the

RIM Reserve Program and CREP II

Governor signed an agreement with the Federal Government on 4-22-05 for the CREP II program. CREP II will target enrollment of conservation easement in the following watershed locations: Lower Mississippi, Red River Basin, Des Moines and Missouri. The total cost of the project is estimated to be \$250 million, to which the state would contribute approximately \$50 million (20%); the rest would be provided by the federal government (80%,) or a 4:1 leverage opportunity. The state contribution also includes in-kind contributions as well as funds. A statewide CREP II will allow the agency to begin working simultaneously in three watersheds toward our state cap of 200,000 acres. In CREP II the goal is to enroll 120,000 acres.

The legislature funded the first half of CREP II in the 2005 session. The deadline for Minnesota's CREP agreement with the federal government is 12-31-07.

RIM Reserve/USDA Wetland Reserve Program Partnership (WREP)

The BWSR, in partnership with USDA's Natural Resources Conservation Service (NRCS) submitted an application to participate in USDA's Wetlands Reserve Enhancement Program (WREP) in 2004. Minnesota's approved WREP is a three-year, \$16.2 million plan. Under the plan, the USDA will provide \$2.5 million in 2004, and commits a total of \$15 million over three years. BWSR will provide \$1.2 million towards the effort, allocated over three years. Landowners who apply and are accepted into the WREP must enroll in both a federal WRP easement and a state RIM Reserve easement. This partnership allows Minnesota's BWSR to leverage additional federal WRP dollars for Minnesota reduces the state's payment to landowners. We expect to enroll approximately 7,250 acres in WREP.

Other Conservation Initiatives

BWSR has solicited and received matching funds from the federal North American Wetland Conservation Council (NAWCC) for RIM wetland restoration easements. To date, BWSR has received approximately \$2.8 million for projects throughout the state. These habitat restoration projects include the Minnesota River watershed, the Heron Lake restoration (in Jackson, Nobles, Cottonwood, and Murray counties), Grass Lake restoration (in Kandiyohi County, near Willmar), Northern Tallgrass Prairie restoration (covering 18 counties in Northwestern Minnesota) and the Prairie Heritage

restoration project (covering 38 counties in Southern Minnesota.) These projects include numerous partners and have been initiated at the local level. BWSR continues to seek grants from NAWCC to fund conservation easements associated with special projects like those listed above or projects located within priority watersheds. This matching program requires a 1.5:1 match in order to be competitive nationally.

It is anticipated that conservation groups, such as Pheasants Forever, Ducks Unlimited, Isaac Walton League, Minnesota Waterfowl Association, The Nature Conservancy, Trout Unlimited, and the U.S. Fish and Wildlife Service will continue to leverage dollars towards the establishment of conservation practices on RIM Reserve easements. From 1992 to present, these organizations contributed approximately \$2.8 million to the program, and made additional donations in the form of grass seed and in-kind services.

Impact on Agency Operating Budgets (Facilities Notes)

\$4.75 million of the request is required to complete implementation the CREP II program. (Total CREP II implementation including the FY 2005 appropriation totals \$7.75 million.) This amount is required to support the necessary realty, engineering and administrative functions associated with 4,500+ easement acquisition and establishment of conservation practices on those easement lands. Soil and Water Conservation Districts (SWCDs) will receive approximately 50% of this total as a Conservation Easement Services Grant to offset their cost to secure easement, develop conservation plans, and monitor easement compliance.

Previous Appropriations for this Project

1996	\$11.5 million
1998	\$15.0 million
2000	\$21.0 million
2001	\$51.4 million
2003	\$1.0 million
2005	\$23.0 million

RIM Reserve Program and CREP II

Other Considerations

In April of 1998, a citizen's advisory committee issued a report "The Continuing Journey to Preserve Minnesota's Outdoor Heritage," that sums up the state of wildlife-based recreation in Minnesota. This committee was established by the 1997 Legislature to review the original Reinvest in Minnesota (RIM) program to see if it had been successful. The report found that RIM has been successful, but that it has been underfunded. As a result, Minnesota's fish, wildlife, and native habitats continue to lose ground due to urban sprawl, agricultural practices, and other development. The report concluded that Minnesota must increase investment into programs that protect and restore fish, wildlife, and native plant habitats. The report called for expansion of the RIM Reserve, PWP, and CREP easement programs so that the state can protect more habitat, and recommended a funding level of \$20 million a year to accomplish it.

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Local Government Road Wetland Replacement

2006 STATE APPROPRIATION REQUEST: \$4,200,000

AGENCY PROJECT PRIORITY: 2 of 6

PROJECT LOCATION: Statewide potential - depends on project location.

Project At A Glance

The Minnesota Local Government Roads Wetland Replacement program is in response to a statutory obligation of the state to replace wetlands lost to safety improvements made to public transportation projects as required under M.S. sec. 103G.222, subd.1, (1).

Project Description

The Minnesota Local Government Roads Wetland Replacement program is in response to a state **statutory obligation** to replace wetlands lost to safety improvements made to public transportation projects as required under M.S. sec. 103G.222, subd.1, (1). This program supports the "no-net-loss" requirements of both state and federal regulations. It benefits a wide number of constituent groups: local road authorities by assigning responsibility for replacing the inevitable loss of wetlands to the state; environmental interests by establishing higher quality wetland replacement sites; state taxpayers by reducing the overall costs of constructing these replacement wetlands due to economies of scale; and citizens by avoiding delays in undertaking public safety enhancements to existing roads due to wetland mitigation costs.

The 1996 and 2000 Legislatures amended the Wetland Conservation Act (WCA) after several years of controversy and regulatory inconsistency among local governments, business interests, environmental groups, and others. The local government roads wetland replacement program was a key outcome of these amendments. It transfers responsibility for replacing wetlands lost due to local government road construction from the local road authority to BWSR. This eliminates the need for local government transportation officials to undertake and finance environmental reclamation projects, and consolidates the necessary technical, financial, and other

implementation work to provide for higher quality, more cost-effective wetland replacement.

The Local Government Roads Wetland Replacement program provides the following benefits:

- ⇒ Regulatory simplification and efficient and improved wetland mitigation are achieved by eliminating the need for each local road authority to maintain its own staff expertise and budget to mitigate impacts to wetlands from road projects.
- ⇒ Fragmented impacts from road projects are consolidated in targeted areas to provide habitat, water quality, and other wetland functions away from traffic and highway runoff areas at a lower public cost.
- ⇒ Water management goals such as improving water quality, flood control, greenway preservation, and wildlife corridor enhancement can be better addressed collectively.
- ⇒ Site selection, ranking of project proposals, and setting program strategies consistent with overall state and federal wetland goals are achieved through an interagency process.

Local governments (counties, cities, and townships) believe strongly this state mandate should be a base element in BWSR's budget. The Legislature also recognized this ongoing state obligation by requiring an assessment and recommendations report for the 2001 session. There is stakeholder consensus on the benefits of the program and the need to permanently fund this state obligation. Without a continued state commitment to this funding, local governments face paying for this work locally. That would result in a number of negative consequences:

- reduced or delayed completion of local government road projects;
- increased local property tax levies (levy limits restrict increases);
- reversal of recent statute changes and jeopardizes a fragile stakeholder consensus that resulted in recent wetland regulatory reforms (Laws 1996, Chap. 462 and Laws 2000, Chap. 382); and
- reversal of an agreement with the U.S. Army Corps of Engineers (COE) that allows this program to meet federal regulatory requirements on behalf of local communities. Local road authorities would again have to seek individual federal permits and be responsible for wetland replacement.

Local Government Road Wetland Replacement

Impact on Agency Operating Budgets (Facilities Notes)

Past experience shows that an average of 200 acres of wetlands replacement is required every year at an annual cost of \$2.0 million. This amount is expected to slightly increase to 206 acres in each of the next two years corresponding to an annual cost of \$2.1 million. The number of acres impacted depends most directly on the money available to local governments for road construction. The cost of establishing the wetlands varies widely, from a low of \$4,000 an acre in rural Minnesota, to more than \$30,000 an acre for some projects in the metro area. In order to meet its minimum statutory obligations to conduct wetland replacement BWSR projects that it will need \$4.2 million for the upcoming two years (July 2006 through July 2008), however the total dollars needed may increase due to increased road construction projects.

Previous Appropriations for this Project

1996 \$3 million

1998 \$2.75 million

2000 \$2.75 million 2001 \$2 million

2001 \$2 million 2003 \$2.7 million

2005 \$4.362 million

Other Considerations

The state has not determined whether this program should be funded from transportation sources, environmental sources, or some combination of the two and so it has always been funded via the capital budget. State statute actually requires the replacement of wetlands to occur *before* the losses occur (which is not being done now due to the fact that funding lags the wetland impacts.) This is important in that it takes an average of 2.5 years from the date the funds are available to establish wetland banking credits; two years to find sites, acquire land and then do the construction and seeding and another half-year for the credits to be certified and deposited in the wetland bank. This means that in order to comply with the state and federal regulations that require the banking projections to be done prior to or concurrent with the wetland losses, 2.5 years worth of credits – a positive balance of at least 515 acres – should be established and maintained at a

cost of \$5,15 million. Since the current system of funding has satisfied the federal agencies involved, BWSR does not feel it is necessary to change the process.

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Streambank, Lakeshore, Road Retention

2006 STATE APPROPRIATION REQUEST: \$5,260,000

AGENCY PROJECT PRIORITY: 3 of 6

PROJECT LOCATION:

Project At A Glance

This program will provide for the protection of water quality, fish and wildlife habitat, public infrastructures, and public safety through:

- Protection of environmentally sensitive lake and river shoreland areas through the purchase of conservation easements;
- Correction of severely eroded lake and river stream banks through the installation of permanent erosion control structures and practices; and
- Reduction of flood damages through easements and road retention projects.

Project Description

This program will provide for the protection of water quality, fish and wildlife habitat, public infrastructures, and public safety through:

- Protection of environmentally sensitive lake and river shoreland areas through the purchase of conservation easements;
- Correction of severely eroded lake and river stream banks through the installation of permanent erosion control structures and practices; and
- Reduction of flood damages through the incorporation of water retention into local government road projects.

This program will be implemented in a partnership with the state's 91 soil and water conservation districts, 43 watershed districts, and 87 counties.

Conservation easements: Minnesota's lake and river shorelands are under greatly increasing development pressure as the population ages and internet access makes "cabin living" more attractive year-round. This puts urban-like pressures on those remaining undeveloped lake and river shoreland areas. Because the best shorelands have already been developed, what remains is

often very steep or very wet. Along with being environmentally sensitive, these areas often include important fish and wildlife habitats such as fish spawning areas and loon nesting areas. A program designed after the RIM Reserve program was enacted in 2002 (M.S. sec. 103F.225, Shoreland protection program) in order to assist local governments to protect some of these sensitive shoreland areas in concert with their comprehensive local water management plans and land use plans. Due to a lack of funding this program authorization sunsetted in July of 2004.

As part of a recent BWSR shoreland protection pilot program, Cass County was able to use \$250,000 of state dollars to purchase development rights on land valued at over \$1 million. In doing so, they were able to protect 8,160 feet of shoreline and 219 acres of land. The state's investment will allow for the environmental goals of clean water, fish and wildlife habitat, and open space to be produced from this land in perpetuity.

Erosion control structures and practices: The state's 91 soil and water conservation districts have identified more than 165 miles of severely eroded shoreline and 1,500 miles of eroded stream banks. Erosion of soil from these sites results in degraded water quality, destruction of near-shore fish and wildlife habitats, and impaired recreational use. Because the magnitude of the physical erosion is great, so will be the cost to control the problems.

For example: Although the North Shore of Lake Superior is known for its rocky shoreline, it also includes many bays and other reaches of shoreline that are composed of erodable red clay. Some of these shoreline areas have up to 70-foot-high clay banks. Wave action at the shoreline results in plumes of suspended red clay in the near-shore waters of Lake Superior. When wave action subsides, suspended clay settles to the bottom and blankets rock and sand substrate, which is critical for fish spawning and fish habitat. This area of fish habitat is critical in that it occurs only within the first few hundred yards from the shore. Surveys conducted by BWSR have identified approximately 35 miles of the North Shore's total length of 200 miles as high erosion areas.

Road retention projects: The severe flooding in 1993 and again in 1997 and 2002 has continued to highlight the need to reduce flood damage to roads, bridges, public and private structures, farm field, river banks, and urban centers within many rural parts of Minnesota. An interagency hazard

Streambank, Lakeshore, Road Retention

mitigation team led by the Federal Emergency Management Agency (FEMA) prepared a report that identified floodwater retention at roads as an appropriate measure to reduce future flood damages. As part of this capital request, BWSR proposes to cost-share with local governments the cost of road retention projects. These projects will result in reduced flood damages to roads, bridges, structures, and fields, as well as reduced downstream sedimentation. The sediment and associated nutrient trapping efficiency of these projects is 50 to 90%, providing significant water quality benefits.

BWSR's strategic plan identifies the role of the state acting through BWSR to solve water quality and soil erosion problems voluntarily and collaboratively with local governments. Additionally, the state's soil and water conservation policy (M.S. sec. 103A.206) states that it is the policy of the state to encourage land occupiers (including local governments) to conserve soil and water resources through the implementation of practices to prevent erosion, reduce sedimentation of surface waters, control floods, prevent impairment of dams and reservoirs, and protect public lands.

Impact on Agency Operating Budgets (Facilities Notes)

Project Costs 2006 - 2007

Property acquisition

Easements and engineering and construction of supporting practices \$5 million

Project Management State Staff and Project Administration \$260,000

Previous Appropriations for this Project

2002 \$750,000 (vetoed)

Other Considerations

The state of Minnesota has a reputation for its quality of life. In 2001, Morgan Quitno Press, which annually ranks cities and states, named Minnesota the nation's "most livable state" – for the fifth year in a row. In 2003 and 2004 this ranking has fallen to number two. Minnesota is also

known for its lakes, rivers, and outdoor recreation opportunities, from which the state sees a significant economic impact. According to the Department of Trade and Economic Development, domestic and international travel to Minnesota brings \$9.1 billion into the state's economy annually, supporting 170,300 tourism jobs and generating \$1.1 billion in tax receipts. This program provides additional assurance that the environmental goals of clean water, fish and wildlife, and scenic open spaces that the citizens of Minnesota expect and that people come from around the world to enjoy are preserved and protected.

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Study Area II

2006 STATE APPROPRIATION REQUEST: \$500,000

AGENCY PROJECT PRIORITY: 4 of 6

PROJECT LOCATION: Southwest Minnesota

Project At A Glance

Area II Minnesota River Basin Projects, Inc. is a nine-county joint powers board, initiated in 1978 and empowered by statute (M.S. secs. 103F.171-103F.187) for the purpose of providing technical and financial assistance to local government units for the building of floodwater retarding and retention structures within a general plan for floodplain management. Area II is a 501(c)3 not-for-profit organization with an 18-member Board of Directors, comprised of two county commissioners from each of the member counties. The organization achieves floodwater retention and damage reduction by designing and constructing floodwater control sites which result in improved water quality and waterfowl habitat, temporary storage of floodwaters, reduced streambank erosion, sediment transport channeling nutrients into receiving streams.

Project Description

This southwestern portion of the Minnesota River watershed lies along the Coteau des Prairies, more commonly known as the Buffalo Ridge, where elevation drops range from 80 feet/mile in the Lac qui Parle River watershed to 50 feet/mile in the Redwood River watershed. Due to these very steep slopes, flooding becomes an annually recurring nightmare for the people who live here and make a living from the land. In 1985, annual damages to crops, roads and bridges was estimated by the Corps of Engineers to be \$2.8 million in the Lac qui Parle River watershed alone. These areas typically do not qualify for land retirement programs such as CREP and CRP as these areas do not have the necessary cropping histories to enable their program enrollment. Common land conservation practices often suffer severe erosion and failure with water forces of this magnitude making it imperative to hold

the water where it falls on the landscape. Floodwater retention projects allow this to happen.

The planned projects will be cost-shared on a 75/25 basis illustrating the local commitment to and support of floodwater retention in this area of southwestern Minnesota. This proposal will demonstrate an affordable, practical, and efficient conservation practice that is effective in reducing sedimentation, a long-term goal of the MPCA and the Minnesota River Basin Citizen Advisory Committee. These projects allow for a true, watershed-based non-point source reduction, one conservation practice at a time.

By replacing deficient bridges and culverts with smaller-sized culverts, floodwater retention is created to temporarily store floodwaters and meter out the flow at a rate tolerable by the receiving water-courses. Benefits include reduced downstream flood damages, reduced streambank erosion, less sediments and nutrients introduced into the rivers, and improved roadways for durability and safety. In places where road retentions are not feasible, the construction of small dams many times are. In addition to the floodwater benefits, wildlife habitat improvements are also witnessed with the creation of small permanent pools upstream of the dam to attract and maintain waterfowl production.

Impact on Agency Operating Budgets (Facilities Notes)

No Impact

Previous Appropriations for this Project

Previous allocations to Area II include \$250,000 from the 1996 Bonding Bill, which resulted in the installation of seven road retention structures with additional local funding of \$195,426.47 for a total project investment of \$445,426.47. In 1998, a capital budget appropriation of \$500,000 resulted in four road retentions, two wetland restorations, six small dam repairs, and two newly constructed dams. Local funds in the amount of \$328,586.84 were invested for a total project amount of \$825,145.84. The 2003 Bonding Bill included \$1.4 million for the construction of the Lazarus Creek Floodwater Retention Project which was completed May 2005. Final payment is pending.

Water & Soil Resources Board Project Narrative

Study Area II

Other Considerations

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Army Compatible Use Buffer (ACUB)

2006 STATE APPROPRIATION REQUEST: \$500,000

AGENCY PROJECT PRIORITY: 5 of 6

PROJECT LOCATION: Camp Ripley (Crow Wing, Cass & Morrison

counties)

Project At A Glance

This program will protect water quality, fish and wildlife habitat, public drinking water, public safety and enhance the Camp Ripley ACUB (Army Compatible Use Buffer Program) through:

- Protecting environmentally sensitive riparian areas through the purchase of conservation easements:
- ♦ Applying conservation practices where necessary on riparian land where there is an opportunity to improve water quality and wildlife habitat.
- ◆ Leveraging Federal Funds for voluntary conservation easement purchases.
- Adding an additional incentive to landowners to convey easements in the ACUB zones to ensure the future continuance of Camp Ripley's full training program.

Project Description

BWSR proposes to match \$500,000 in state funds through the Reinvest In Minnesota (RIM) Reserve Program with \$2,000,000 in Federal/ACUB funds to purchase conservation easements on 1,250 acres of land along the Mississippi and Crow Wing Rivers adjacent to Camp Ripley. BWSR and the Camp will work through the three soil and water conservation districts in the affected area to purchase conservation easements on parcels of value to water quality and fish and wildlife habitat.

Authorized in December of 2002, the ACUB program is a federal program regulated by the Department of Defense. The effect of population growth and development in proximity to military installations has created

encroachment issues nationwide that impacts our military's capability to train soldiers. ACUB supports the Army's mission to effectively train soldiers with minimal impact to civilians. Trained and ready soldiers require land for maneuvers, live fire, testing and other operations. ACUBs establish buffer areas around Army installations to limit effects of encroachment and maximize land inside the installation that can be used to train soldiers.

ACUBs support the Army's federal mandate to comply with all environmental regulations, including endangered species habitat protection. By working in partnership with willing landowners and a multitude of state and local agencies and conservation organizations, ACUB's allow coordination of habitat conservation planning at the ecosystem level to ensure greater species and habitat recovery. ACUBs also support local and regional planning and sustainability efforts while accomplishing common goals.

The Army's objectives of ACUB have established the foundation from which Camp Ripley's ACUB has been adopted. The objectives include: 1) reduce training restrictions; 2) meet Endangered Species Act recovery responsibilities; 3) prevent development along installation boundaries; and 4) prevent future threatened and endangered species listings.

Each installation has had to find creative ways to deal with the issues of encroachment. The most common solution has been restricting unit training activities, which degrades training realism. Since encroachment has yet to become critical at Camp Ripley, commanders training at Camp Ripley have not yet experienced limitations in field training. However, this could change quickly. Acquiring the interest in lands around Camp Ripley through ACUB will ensure unrestricted training to its users far into the future.

Camp Ripley is one of the most modern reserve training facilities in the United States, and is a vital training facility offering full soldier readiness training. In addition, Camp Ripley is a statutory game refuge encompassing 53,000 acres of Minnesota's finest fish and wildlife habitat. Camp Ripley's ACUB consists of about 110,000 acres of land within a three mile area adjacent to Camp. The area is subdivided into four priority zones based on the potential for development and the potential impacts of military training on surrounding areas. The Mississippi River and the Crow Wing River represent the highest and second highest priority zones, respectively, in which to prevent future conflicts by acquiring easements from willing sellers.

Army Compatible Use Buffer (ACUB)

Camp Ripley is bordered by 29 miles of river frontage. The northern boundary is comprised of nine miles of the Crow Wing River and the eastern boundary is comprised of 18 miles of the Mississippi River. In fact, Camp Ripley's ownership on the Mississippi River represents the largest contiguous block of land ownership on North America's longest river spanning 2,300 miles. These rivers not only constitute very important habitat corridors, or greenways, but also are also attractive areas for development. With their proximity to major state and federal highways, the potential for near-term development of these important corridors is very high. According to the Minnesota Demographic Center, the Mississippi Headwaters Corridor is projected to develop at a much higher rate than most of the state (36%) through year 2030. Growth issues in the headwaters area were instrumental in leading to the establishment of the North Central Minnesota Lakes Pilot Project, part of Governor Pawlenty's Clean Water Initiative. Cass and Crow Wing Counties are two of the five member counties in the project.

ACUB presents an opportunity to leverage federal funds to protect the public health and infrastructure related to the Mississippi River. Minnesota is known for its outstanding water resources. Although our lakes get most of the attention, having the headwaters of one of the world's greatest river systems in our state is both a unique asset and a major responsibility. The Mississippi River Basin is the only one of Minnesota's nine major drainage basins that is entirely within the state. The Upper Mississippi River Basin also provides drinking water for approximately one million Minnesotans; 64,552 residents of St. Cloud; 414,735 residents of St. Paul; and 382,618 residents of Minneapolis. Water quality in the Mississippi River is generally very good as it leaves the forested and transition zones and enters the prairie zone. Investing in federally leveraged easements offers the added benefit of protecting the state's largest public drinking water source, by preventing increases in runoff and attached pollutants.

In addition, Camp Ripley lies along the state's ecological transition zone between the prairies to the south, and the forested zone to the north. It is also adjacent to the Mississippi and Crow Wing Rivers, both of which provide important conservation corridors. Riparian easements would help protect an area very rich in plant and animal diversity.

ACUB offers the state a great opportunity to add conservation benefits to the federal no-build easements at a fraction of the cost of buying the benefits on its own, while adding significant water quality, public infrastructure and ecological benefits. Locally, over 100 landowners have expressed interest in participating in ACUB, which would allow over 14,000 acres to be reserved.

Impact on Agency Operating Budgets (Facilities Notes)

None

Previous Appropriations for this Project

None

Other Considerations

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Grass Lake

2006 STATE APPROPRIATION REQUEST: \$2,200,000

AGENCY PROJECT PRIORITY: 6 of 6

PROJECT LOCATION: Kandiyohi County

Project At a Glance

This initiative would enable further restoration of the 1,200-acre Grass Lake prairie wetland basin located adjacent to Willmar. Key benefits include wildlife habitat improvement, downstream water quality improvement, and stormwater runoff management for the city of Willmar, Lake Wagonga and Big Kandiyohi Lake.

Project Description

The shallow, 1,200-acre Grass Lake basin was drained for farmland many years ago by Kandiyohi County and many private landowners. Historically, crop losses often occurred within the Grass Lake area due to flooding, particularly during wet cycles. Between 1989 and 2000, 11 landowners within the basin enrolled lands in the Reinvest in Minnesota (RIM) Reserve program via perpetual conservation easements for wetland restoration and reestablishment of native prairie vegetation. Two sub basins have been restored to date.

County Ditch 23A, which runs through Grass Lake, also serves as an outlet for runoff from much of the city of Willmar. In order to facilitate improved stormwater management and the potential restoration of Grass Lake, the city previously commissioned a hydrologic analysis and preliminary design of two large stormwater lift stations. However, the high costs for construction (approximately \$5 million) and operation (approximately \$50,000 per year) of these facilities precluded the city from undertaking this plan. Previous attempts to seek state and federal grant funds to assist implementation of this plan with the two lift stations have been unsuccessful. After this full

restoration plan became bogged down, one major landowner within the Grass Lake basin decided not to enroll in RIM.

An alternative, lower cost plan to restore most of Grass Lake is under development, in partnership with the city of Willmar and Kandiyohi County. This alternative plan would involve diverting as much contributing drainage area as possible into Grass Lake and rerouting County Ditch 23A from the city of Willmar around the southern side of Grass Lake. This plan would preclude the requirement for stormwater lift stations and result in a savings of approximately \$3.6 million in construction costs and \$50,000 annually in operation and maintenance costs.

Further restoration of Grass Lake would enable this large area to better serve as a contiguous wildlife habitat area, as well as a sediment and nutrient trap and runoff detention area. This restoration has been identified as a goal for water quality improvement and flood damage reduction downstream for Lake Wagonga and Big Kandiyohi Lake. Further restoration would provide substantial waterfowl and other wildlife habitat in the high priority prairie "pothole" region of Minnesota. Water quality improvements would benefit the downstream chain of lakes, as well as the downstream rivers and associated water uses. This includes the South Fork of the Crow River, the Mississippi River and the associated water supplies for Minneapolis and St. Paul.

To date, many local state and federal governmental units and nonprofit organizations have participated in this project by acquiring conservation easements, implementing conservation practices and providing technical services. This initiative would further enhance the effectiveness of the investments made to date.

The requested funds would be allocated approximately as follows:

Conservation Easements: \$520,000
Rerouting of County Ditch 23A \$900,000
Water Control Structures and Vegetation Practices: \$500,000
Professional and Technical Services: \$280,000
Total: \$2,200,000

Grass Lake

Impact on Agency Operating Budgets (Facilities Notes)

No Impact

Previous Appropriations for this Project

State RIM Program Appropriations (1988 – 1999)	\$679,000
North American Wetland Conservation Act Grants	\$500,000
Total to Date	\$1,179,000

Other Considerations

During recent years, RIM Reserve Program funding has been dedicated to state-federal partnerships, including the Conservation Reserve Enhancement Program (CREP 1 and CREP 2) and the Wetland Reserve Enhancement Program (WREP). The emphasis on state-federal partnerships has leveraged substantial federal funding for conservation in Minnesota, but has limited opportunities to further restore the Grass Lake basin.

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