

RULE C: STORMWATER MANAGEMENT

1. **POLICY.** It is the policy of the Board of Managers to manage stormwater and snowmelt runoff on a local, regional and watershed basis; to promote natural infiltration of runoff throughout the District to preserve flood storage and enhance water quality; and to address the unique nature of flooding issues within the Flood Management Zone, through the following principles:
 - (a) Maximize water quality and flood control on individual project sites through Better Site Design practices and stormwater management.
 - (b) Minimize land use impacts and improve operational and maintenance efficiency by siting stormwater BMPs, when needed, regionally unless local resources would be adversely affected.
 - (c) Treat stormwater runoff before discharge to surface waterbodies and wetlands, while considering the historic use of District water features.
 - (d) Ensure that future peak rates of runoff are less than or equal to existing rates.
 - (e) Reduce the existing conditions peak rate of discharge along Lower Rice Creek and the rate of discharge and volume of runoff reaching Long Lake, to preserve the remaining floodplain storage volume within Long Lake and mitigate the historic loss of floodplain storage.
 - (f) Preserve remaining floodplain storage volume within the Rice Creek Watershed to minimize flood potential throughout the District.
2. **REGULATION.** A permit incorporating an approved stormwater management plan is required under this rule for development, consistent with the following:
 - (a) A permit is required for subdivision of an area exceeding one acre. This includes subdivision for single-family residential, multi-unit residential, commercial, industrial, or institutional development.
 - (b) A permit is required for development, other than Public Linear Projects, that creates or reconstructs 10,000 square feet or more of impervious surface. This threshold is cumulative of all impervious surface created or reconstructed through multiple phases or connected actions of a single complete project, as defined by the District, on a single parcel or contiguous parcels of land under common ownership, development or use.
 - (c) For Public Linear Projects, a permit is required when one acre or more of impervious surface will be created or reconstructed through multiple phases or connected actions of a single complete project, as defined by the District.
3. **STORMWATER MANAGEMENT PLAN REQUIRED.** A stormwater management plan shall be submitted with the permit application for a project equaling or exceeding the threshold of Section 2. The stormwater management plan shall fully address the design and function of the project proposal and the effects of altering the landscape relative to the direction, rate of discharge, volume of discharge and timing of runoff.
4. **MODELING REQUIREMENTS FOR STORMWATER MANAGEMENT PLANS.**
 - (a) A hydrograph method or computer program based on NRCS Technical Release #20 (TR-20) and subsequent guidance must be used to analyze stormwater runoff for the design or analysis of discharge and water levels within and off the project site. The runoff from

pervious and impervious areas within the model shall be modeled separately.

- (b) In determining Curve Numbers for the post-development condition, the Hydrologic Soil Group (HSG) of areas within construction limits shall be shifted down one classification for HSG C (Curve Number 80) and HSG B (Curve Number 74) and ½ classification for HSG A (Curve Number 49) to account for the impacts of grading on soil structure unless the project specifications incorporate soil amendments in accordance with District Soil Amendment Guidelines. This requirement only applies to that part of a site that has not been disturbed or compacted prior to the proposed project.
- (c) The analysis of flood levels, storage volumes, and discharge rates for waterbodies and stormwater management basins must include the NOAA Atlas 14 values, as amended, using a nested rainfall distribution (e.g. MSE 3), for the 2 year, 10 year and 100 year return period, 24-hour rainfall events and the 10-day snowmelt event (Curve Number 100), in order to identify the critical duration flood event. The District Engineer may require analysis of additional precipitation durations to determine the critical duration flood event. Analysis of the 10-day snowmelt event is not required for stormwater management detention basins with a defined outlet elevation at or below the 100 year return period, 24-hour rainfall event elevation.

5. STORMWATER MANAGEMENT PLAN FRAMEWORK.

- (a) When an existing regional BMP is proposed to manage stormwater runoff, the proposed total impervious surface area must be equal to or less than the impervious surface allocated within the original approved stormwater plan for that site. If an impervious surface area was not specified within the original approved stormwater plan for the site, the applicant shall show that the BMP was designed and constructed to manage the stormwater runoff from the project site, the applicant has permission to utilize any remaining capacity in the BMP, the BMP is subject to maintenance obligations enforceable by the District, and it is being maintained to its original design.
- (b) Stormwater management plans, with the exception of those for single family residential developments, must specify the proposed impervious surface area draining to each BMP for each land parcel
- (c) A combination of Stormwater BMPs may be used to meet the requirements of section(s) 6, 7, and 8.
- (d) A local surface water management plan or ordinance of the local land use authority may contain standards or requirements more restrictive than these rules. The stormwater management plan must conform to the local surface water management plan or ordinance of the local land use authority.
- (e) The proposed project must not adversely affect off-site water levels or resources supported by local recharge, or increase the potential for off-site flooding, during or after construction.
- (f) A landlocked basin may be provided an outlet only if it:
 - (1) Conforms with District Rule F, as applicable.
 - (2) Provides sufficient dead storage volume to retain the runoff resulting from back-to-back 100-year, 24-hour rainfall events.

(3) Does not create adverse downstream flooding or water quality conditions as a result of the change in the rate, volume or timing of runoff or a change in drainage patterns.

(g) A municipality or public road authority may prepare a comprehensive stormwater management plan setting forth an alternative means of meeting the standards of sections 6 and 7 within a defined subwatershed. Once approved by the District and subject to any stated conditions, the plan will apply in place of those sections.

6. WATER QUALITY TREATMENT.

(a) Development creating or reconstructing impervious surface shall apply Better Site Design (BSD) techniques as outlined in the MPCA Minnesota Stormwater Manual as amended (www.stormwater.pca.state.mn.us). A BSD guidance document and checklist is available on the District's website.

(b) Sediment shall be managed on-site to the maximum extent practicable before runoff resulting from new or reconstructed impervious surface enters a waterbody or flows off-site.

(c) WATER QUALITY TREATMENT STANDARD.

(1) The required water quality treatment volume standard for all projects, except Public Linear Projects, is determined as follows:

$$\text{Required Water Quality Treatment Volume (ft}^3\text{)} = \text{Area of New or Reconstructed Impervious Surface (ft}^2\text{)} \times 1.1 \text{ (in)} \div \text{TP Removal Factor from Table C1} \div 12 \text{ (in/ft)}$$

(2) The required water quality treatment volume standard for Public Linear Projects is determined as follows:

$$\begin{aligned} \text{Required Water Quality Treatment Volume (ft}^3\text{)} &= \text{\{Greater of\}} \\ &\quad \text{Area of New Impervious Surface (ft}^2\text{)} \times 1.0 \text{ (in)} \div 12 \text{ (in/ft)} \\ &\quad \text{\{OR\}} \\ &\quad \text{Sum Area of New and Reconstructed Impervious Surface (ft}^2\text{)} \times 0.5 \text{ (in)} \div 12 \text{ (in/ft)} \end{aligned}$$

- (3) For alternative Stormwater BMPs not found in Table C1 or to deviate from TP Removal Factors found in Table C1, the applicant may submit a TP Removal Factor, expressed as annual percentage removal efficiency, based on supporting technical data, for District approval.
- (4) Stormwater runoff treated by the BMP during a rain event will not be credited towards the treatment requirement.

TABLE C1. TP REMOVAL FACTORS FOR PROPERLY DESIGNED BMPs.

BMP	BMP Design Variation	TP Removal Factor *
Infiltration **	Infiltration Feature	1.00
Water Reuse **	Irrigation	1.00
Biofiltration	Underdrain	0.65
Filtration	Sand or Rock Filter	0.50
Stormwater Wetlands	Shallow Wetland	0.40
	Pond/Wetland	0.55
Stormwater Ponds ***	Wet Pond	0.50
	Multiple Pond	0.60

Source: Adapted from Table 7.4 from the Minnesota Stormwater Manual, MPCA.

* Refer to MPCA Stormwater Manual for additional information on BMP performance.

Removal factors shown are average annual TP percentage removal efficiencies intended solely for use in comparing the performance equivalence of various BMPs.

** These BMPs reduce runoff volume.

*** Stormwater ponds must also provide 2.5" of dead storage as required by Section 9(d)(2).

(d) BMP LOCATIONAL SITING.

- (1) BMPs shall be located either on-site to treat runoff at the point of generation, or regionally within the Resource of Concern Drainage Area.
- (2) If infiltration is feasible on site (see Table C2), on-site or regional BMPs must provide volume control to meet the standard of subsection 6(c). If infiltration is not feasible, any BMP may be used.
- (3) Off-site and/or regional BMPs must be sited in the following priority order:
 - (i) In a downstream location that intercepts the runoff volume leaving the project site prior to the Resource of Concern.
 - (ii) Anywhere within the same Resource of Concern Drainage Area (see Figures C1A-C1E) that results in no greater mass of Total Phosphorus reaching the resource of concern than on-site BMPs.

TABLE C2. SPECIFIC CONDITIONS THAT MAY RESTRICT INFILTRATION.

Type	Specific Project Site Conditions	Required Submittals
Potential Contamination	Potential Stormwater Hotspots (PSH)	PSH Locations and Flow Paths
	Contaminated Soils	Documentation of Contamination Soil Borings
Physical Limitations	Low Permeability Soils (HSG C & D)	Soil Borings
	Bedrock within three vertical feet of bottom of infiltration area	Soil Borings
	Seasonal High Water Table within three vertical feet of bottom of infiltration area	Soil Borings High Water Table
	Karst Areas	Geological Mapping or Report
Land Use Limitations	Utility Locations	Site Map
	Nearby Wells (Private and/or Municipal) *	Well Locations

* Refer to Minnesota Stormwater Manual or the Minnesota Department of Health for setback requirements.

- (e) Stormwater runoff from all new and reconstructed impervious surface must be captured and treated for total phosphorus if feasible. Notwithstanding, runoff from undisturbed impervious surface not otherwise being treated prior to the Resource of Concern may be treated in lieu of treating new or reconstructed impervious surface, provided the runoff from that surface drains to the same Resource of Concern as the new/reconstructed surface not being treated. Except for Public Linear projects, the area not treated for phosphorus may not exceed 15 percent of all the new or reconstructed impervious surface. For all untreated surface, TSS must be removed to the maximum extent practicable. Total water quality treatment volume for the project must be provided in aggregate pursuant to subsections 6(c) and 6(d) , except that for a Public Linear Project, water quality treatment volume for reconstructed impervious surface, if required by subsection 2(c), must be provided only to the extent feasible.
- (f) For single-family residential development, the runoff from impervious surface other than parking or driving surface that, in the District's judgment, cannot reasonably be routed to a stormwater BMP is considered effectively treated for water quality if:
 - (1) The length of the flow path across the impervious surface is less than the length of the flow path across the pervious surface to which it discharges; and
 - (2) The pervious surface is vegetated and has an average slope of five percent or less.
- (g) Banked "volume control" credits and debits established by public entities for Public Linear Projects with the RCWD prior to July 1, 2013 will continue to be recognized and enforced

until all credits are used or all debits are fulfilled. Existing credits and debits may be used and fulfilled, respectively, anywhere within the applicant's jurisdiction on any public project.

7. PEAK STORMWATER RUNOFF CONTROL.

- (a) Peak stormwater runoff rates for the proposed project at the project site boundary, in aggregate, must not exceed existing peak runoff rates for the 2-year, 10-year and 100-year, 24-hour rainfall events, or a different critical event duration at the discretion of the District Engineer. Notwithstanding, peak runoff may be controlled to this standard in a regional facility consistent with paragraph 7(b). Aggregate compliance for all site boundary discharge will be determined with respect to runoff not managed in a regional facility.
- (b) Any increase in a critical duration flood event rate at a specific point of discharge from the project site must be limited and cause no adverse downstream impact. Table C3 shows the maximum curve numbers that may be utilized for existing condition modeling of those project site areas not covered by impervious surface.
- (c) Within the Flood Management Zone only (see Figure C2), peak runoff rates for the 2, 10 and 100 year 24-hour rainfall events shall be reduced to $\leq 80\%$ of the existing condition. This requirement does not apply if the project is a Public Linear Project.

TABLE C3. CURVE NUMBERS FOR EXISTING CONDITION PERVIOUS AREAS.

Hydrologic Soil Group	Runoff Curve Number *
A	39
B	61
C	74
D	80

* Curve numbers from NRCS Technical Release #55 (TR-55).

TABLE C4. HYDROPERIOD STANDARDS.

Wetland Susceptibility Class	Permitted Storm Bounce for 2-Year and 10-Year Event *	Inundation Period for 2-Year Event *	Inundation Period for 10-Year Event *
Highly susceptible	Existing	Existing	Existing
Moderately susceptible	Existing plus 0.5 ft	Existing plus 1 day	Existing plus 7 days
Slightly susceptible	Existing plus 1.0 ft	Existing plus 2 days	Existing plus 14 days
Least susceptible	No limit	Existing plus 7 days	Existing plus 21 days

Source: Adapted from: Stormwater and Wetlands Planning and Evaluation Guidelines for Addressing Potential Impacts of Urban Stormwater and Snowmelt Runoff on Wetlands.

* Duration of 24-hours for the return periods utilizing NOAA Atlas 14.

8. BOUNCE AND INUNDATION PERIOD.

- (a) The project must meet the hydroperiod standards found in Table C4 with respect to all down-gradient wetlands.
- (b) Wetland Susceptibility Class is determined based on wetland type, as follows:

- (1) Highly susceptible wetland types include: sedge meadows, bogs, coniferous bogs, open bogs, calcareous fens, low prairies, coniferous swamps, lowland hardwood forests, and seasonally flooded waterbasins.
- (2) Moderately susceptible wetland types include: shrub-carrs, alder thickets, fresh (wet) meadows, and shallow & deep marshes.
- (3) Slightly susceptible wetland types include: floodplain forests and fresh wet meadows or shallow marshes dominated by cattail giant reed, reed canary grass or purple loosestrife.
- (4) Least susceptible wetland includes severely degraded wetlands. Examples of this condition include cultivated hydric soils, dredge/fill disposal sites and some gravel pits.

9. DESIGN CRITERIA.

(a) Infiltration BMPs must be designed to provide:

- (1) Adequate pretreatment measures to remove sediment before runoff enters the primary infiltration area;
- (2) Drawdown within 48-hours from the end of a storm event. Soil infiltration rates shall be based on the appropriate HSG classification and associated infiltration rates (see Table C5). The least permeable layer of the soil boring column must be utilized in BMP calculations (see Design Criteria (e)). Alternate infiltration rates based on a recommendation and certified measurement testing from a licensed geotechnical engineer or licensed soil scientist will be considered. Infiltration area will be limited to horizontal areas subject to prolonged wetting;
- (3) A minimum of three feet of separation from the Seasonal High Water Table; and
- (4) Consideration of the Minnesota Department of Health guidance document Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas. Documentation shall be submitted to support implementation of this guidance document and will be accepted at the discretion of the District Engineer.

(b) Water Reuse BMPs must conform to the following:

- (1) Design for no increase in stormwater runoff from the irrigated area or project site.
- (2) Required design submittal packages for water reuse BMPs must include:
 - (i) An analysis using Metropolitan Council Stormwater Reuse Guide 'Water Balance Tool Irrigation Constant Demand' spreadsheet for irrigation practices or 'Water Balance Tool Non-Irrigation Constant Demand' spreadsheet for non-irrigation practices. The tools are available download at: [http://www.metrocouncil.org/wastewater-water/planning/water-supply-planning/studies-projects-workgroups-\(1\)/completed-studies-projects/stormwater-reuse-guide.aspx](http://www.metrocouncil.org/wastewater-water/planning/water-supply-planning/studies-projects-workgroups-(1)/completed-studies-projects/stormwater-reuse-guide.aspx);
 - (ii) Documentation demonstrating adequacy of soils, storage system, and delivery system; and
 - (iii) Operations plan.
- (3) Approved capacity of an irrigation practice will be based on:
 - (i) An irrigation rate of 0.5 inches per week over the irrigated pervious area(s) or the rate identified through the completion of the Metropolitan Council Stormwater Reuse Guide 'Water Balance Tool Irrigation Constant Demand'

Spreadsheet (whichever is less); or as approved by the District; and

- (ii) No greater than a 26 week (April 15th to October 15th) growing season.

An additional water quality treatment capacity beyond 0.5 inches per week may be recognized under a subsection C.5(f) plan or a C.13 phased development permit based on an average of three consecutive years of monitoring records of volume irrigated and pursuant to a monitoring plan approved by the District.

- (4) Approved capacity of a non-irrigation practice shall be based on the rate identified through the completion of the Metropolitan Council Stormwater Reuse Guide 'Water Balance Tool Non-Irrigation Constant Demand' spreadsheet, or as approved by the District.

- (c) Biofiltration/filtration BMPs must be designed to provide:

- (1) Adequate pretreatment measures to remove sediment before runoff enters the primary biofiltration area;
- (2) Drawdown within 48-hours from the end of a storm event;
- (3) A minimum of 12-inches of organic material or sand above the rock trench or drain tile system; and
- (4) Drain tile system must be designed above the Seasonal High Water Table.

TABLE C5. SOIL TYPE AND INFILTRATION RATES.

Hydrologic Soil Group	Soil Textures	Corresponding Unified Soil Classification		Infiltration Rate (in/hr)
A	Gravel Sandy Gravel Silty Gravels	GW	Well-graded gravels, sandy gravels	1.63
		GP	Gap-graded or uniform gravels, sandy gravels	
		GM	Silty gravels, silty sandy gravels	
		SW	Well-graded gravelly sands	
	Sand Loamy Sand Sandy Loam	SP	Gap-graded or uniform sands, gravelly sands	0.8
B	Loam Silt Loam	SM	Silty sands, silty gravelly sands	0.45
		MH	Micaceous silts, diatomaceous silts, volcanic ash	0.3
C	Sandy Clay Loam	ML	Silts, very fine sands, silty or clayey fine sands	0.2
D	Clay Loam Silty Clay Loam Sandy Clay Silty Clay Clay	GC	Clayey gravels, clayey sandy gravels	0.06
		SC	Clayey sands, clayey gravelly sands	
		CL	Low plasticity clays, sandy or silty clays	
		OL	Organic silts and clays of low plasticity	
		CH	Highly plastic clays and sandy clays	
		OH	Organic silts and clays of high plasticity	

Source: Adapted from the "Design infiltration rates" table from the Minnesota Stormwater Manual, MPCA, (January 2014).

- (d) Stormwater ponds must be designed to provide:
- (1) Water quality features consistent with NURP criteria and accepted design standards for average and maximum depth;
 - (2) A permanent wet pool with dead storage at least equal to the runoff volume from a 2.5-inch rainfall over the area tributary to the pond;
 - (3) An outlet structure capable of preventing migration of floating debris and oils for at least the one-year storm;
 - (4) An identified emergency overflow spillway sufficiently stabilized to convey flows greater than the 100-year critical storm event; and
 - (5) An outlet structure to control the 2-year, 10-year & 100-year frequency events.
- (e) Soil borings (utilizing ASTM D5921 and D2488, as amended) shall be considered for design purposes, and provided to the District, for each proposed BMP. The soil borings must be taken to a depth of at least 5 feet below the bottom of the proposed feature.
- (f) An outfall structure discharging directly to a wetland, public water or public water wetland must incorporate a stilling-basin, surge-basin, energy dissipater, placement of ungrouted natural rock riprap or other feature to minimize disturbance and erosion of natural shoreline and bed resulting from stormwater discharges. Where feasible, outfall structures are to be located outside of the natural feature.

TABLE C6. LOW FLOOR AND LOW ENTRY FREEBOARD REQUIREMENTS.

Freeboard	100-Year Flood Elevations		Detention Basins, Wetlands & Stormwater Ponds		Infiltration and Biofiltration Basins			Rain Gardens*
	100-yr	EOF	100-yr	EOF	Bottom	100-yr	EOF	EOF
Low Floor	2.0 ft	1.0 ft	0.0 ft	NA	0.0 ft	NA	NA	NA
Low Entry	NA	NA	2.0 ft	1.0 ft	NA	2.0 ft	1.0 ft	0.5 ft

- (g) All new residential, commercial, industrial and other habitable or non-habitable structures, and all stormwater BMPs, must be constructed so that the lowest floor and lowest entry elevations comply with Table C6.

The low entry freeboard criterion of Table C6 may be deemed met when the structure does not have the required vertical separation, but is protected from surface flooding to the required elevation by a berm or other natural or constructed topographic feature capable of providing flood protection.

Within a landlocked basin, minimum low floor elevations must be at least one foot above the surveyed basin run out elevation. Where a structure is proposed below the run out elevation of a land-locked basin, the low floor elevation will be a minimum of two feet above the highest water level of either the 10-day snowmelt event or back-to-back 1 00-year, 24-hour rainfalls. Aerial photos, vegetation, soils, and topography may be used to derive a "normal" water elevation for the purpose of computing the basin's 100-year elevation.

- (h) All stormwater management structures and facilities must be designed for maintenance access and be properly operated and maintained in perpetuity to assure that they continue to function as designed. The maintenance responsibility must be memorialized in a document executed by the property owner in a form acceptable to the District and filed for record on the deed. Alternatively, a public permittee may meet its perpetual maintenance obligation by executing a programmatic or project-specific maintenance agreement with the District. Regional ponds owned by public entities that are only used to meet the runoff rate requirements of the District rule do not need a maintenance agreement with the District.
- (i) The permittee must use construction best practices so that the facility as constructed will conform to design specifications and the soil and surrounding conditions are not altered in a way adverse to facility performance.
- (j) Before work under the permit is deemed complete, the permittee must submit as-built plans demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications. If at any time the District finds that the stormwater facility is not performing as designed, on District request the permittee must undertake reasonable investigation to determine the cause of inadequate performance.

10. EASEMENTS.

- (a) Before permit issuance, the permittee must, submit a copy of any plat or easement required by the local land use authority establishing drainage or flowage over stormwater management facilities, stormwater conveyances, ponds, wetlands, on-site floodplain up to the 100-year flood elevation, or any other hydrologic feature.
- (b) Before permit issuance, the permittee must convey to the District an easement to the public drainage system specifying a District right of maintenance access over the right of way of the public drainage system as identified within the public drainage system record. If the right of way of the public drainage system is not described within the record, then the easement shall be conveyed with the following widths:
 - For tiled/piped systems, 40 feet wide perpendicular to the direction of flow, centered on the tile line or pipe;
 - For open channel systems, a width that includes the channel and the area on each side of the channel within 20 feet of top of bank. For adequate and safe access, where top of bank is irregular or obstruction exists, the District may specify added width.
- (c) Public Linear Projects are exempt from the public drainage system easement requirement of Section 10(b).
- (d) For projects within the District's Comprehensive Wetland Protection and Management Plan (CWPMP) areas, the Wetland Management Corridor (WMC) boundary delineation, buffer and easement requirements found at Rule F.6 apply. As stated in Rule F.5(e), Public Linear Projects are not subject to the requirements of Rule F.6.

- 11. **REQUIRED EXHIBITS.** The following exhibits must accompany the permit application. The vertical datum must clearly be labeled on each plan set.

- (a) An erosion & sediment control plan and, for projects that require an NPDES permit, a Storm Water Pollution Prevention Plan.
- (b) Property lines and delineation of lands under ownership of the applicant.
- (c) Delineation of the subwatershed contributing runoff from off-site, proposed and existing subwatersheds onsite, emergency overflows, and drainageways.
- (d) Geotechnical analysis including soil borings at all proposed stormwater management facility locations utilizing ASTM D5921 and D2488, as amended.
- (e) Proposed and existing stormwater facilities' location, alignment and elevation.
- (f) Delineation of existing on-site wetland, marshes and floodplain areas.
- (g) Identification of existing and proposed normal, ordinary high and 100-year water elevations on-site.
- (h) Identification of existing and proposed contour elevations within the project site .
- (i) Construction plans and specifications of all proposed stormwater management facilities, including design details for outlet control structures.
- (j) Stormwater runoff volume and rate analyses for the 2- 10- and 100-year critical events, existing and proposed conditions utilizing NOAA Atlas 14.
- (k) All hydrologic, water quality and hydraulic computations completed to design the proposed stormwater management facilities.
- (l) Narrative including a project description, discussion of BMP selection, and revegetation plan for the project site.
- (m) Other project site-specific submittal requirements as may be required by the District.

12. EXCEPTIONS.

- (a) A permit is not required for single-family residential construction on an individual lot of record, if the proposed impervious surface of the lot is less than 10,000 square feet, excluding the driveway. If the lot is within a development previously approved by the District, the construction must conform to the previous approval.
- (b) Rule C requirements do not apply to sidewalks and trails 10 feet wide or less that are bordered down-gradient by vegetated open space or vegetated filter strip with a minimum width of 5 feet.
- (c) Rule C requirements do not apply to Bridge Spans and Mill, Reclamation & Overlay projects.
- (d) Rule C.6 and C.7 requirements do not apply to single family residential subdivisions creating seven or fewer lots that:
 - (1) Establish no new public roadway; and
 - (2) Include no private roadway/driveway serving three or more lots.

- (e) Criteria of Section 7 may be waived if the project site discharges directly to a water body with large storage capacity (such as a public water), the volume discharged from the project site does not contribute to a downstream flood peak, and there are no downstream locations susceptible to flooding.
- (f) Section 6 and Section 7 are waived for a portion of a project that paves a gravel roadway if the right-of-way ditch is maintained and does not discharge a concentrated flow directly to a wetland or another sensitive water body.

13. EXTENDED PERMIT TERM AND REGIONAL FACILITIES FOR NON-RESIDENTIAL PHASED DEVELOPMENT.

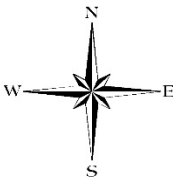
- (a) The following definitions apply to this section:
 - (1) “Area Development Permit” (ADP) means a District stormwater management permit for non-residential development that includes construction of a stormwater management facility explicitly intended to serve compliance requirements for a parcel other than that on which the facility is located.
 - (2) “Phased Development Permit” (PDP) means a District stormwater management permit for non-residential development that includes construction of a stormwater management facility explicitly intended to serve compliance requirements not just for development under the permit, but also for subsequent development on that parcel or a contiguous parcel under common ownership.
- (b) If an off-site stormwater management facility approved under a prior ADP cannot be used for compliance due to a rule change occurring since the date of ADP approval, the District nevertheless by permit will approve its use, subject to the following:
 - (1) The applicant must demonstrate that the facility was built in compliance with the ADP, that the ADP identified the development site as one that may use the facility, and that the requirements of subsection 5(a), above, are met.
 - (2) If the current rule requires a level of peak flow or volume control, or of water quality treatment, beyond that provided by the off-site facility, the applicant must provide for the additional treatment. This does not disallow use of an existing facility on the ground that it does not meet a sequencing requirement with respect to the BMP location or type.

The protection against rule change provided by this subsection 13(b) does not apply if the District makes written findings, on the basis of new knowledge or information, that use of the facility would have a material adverse impact on a water quality, flood management or other specific public interest, or if the approval date of the development permit is more than 10 years after the date of ADP approval.

- (c) The District may issue a PDP with a permit term of up to 10 years.
 - (1) During the permit term, development using the stormwater management facilities approved under the PDP will not be subject to a rule change occurring after the date of PDP approval, provided the PDP states the design criteria to which subsequent development will conform and the proposed development meets those criteria.

- (2) If a PDP is in effect as of December 1, 2014, on request the District will extend the permit expiration date in accordance with this subsection 13(c). In such a case, the requirement that the permit state design criteria is relaxed. However, the applicant must demonstrate the design and constructed capacity of the facilities and the capacity allocated to the proposed development.
- (3) If a PDP was approved after December 1, 2004 but has expired, an application for a subsequent development phase may be considered under the terms of subsection 13(b), above.
- (d) This section does not apply to an ADP or a PDP approved before December 1, 2004.

Rice Creek Watershed District



Flow Direction

RCWD Watercourses

Lakes

RCWD Legal Boundary

Resource of Concern Drainage Area

Transportation System

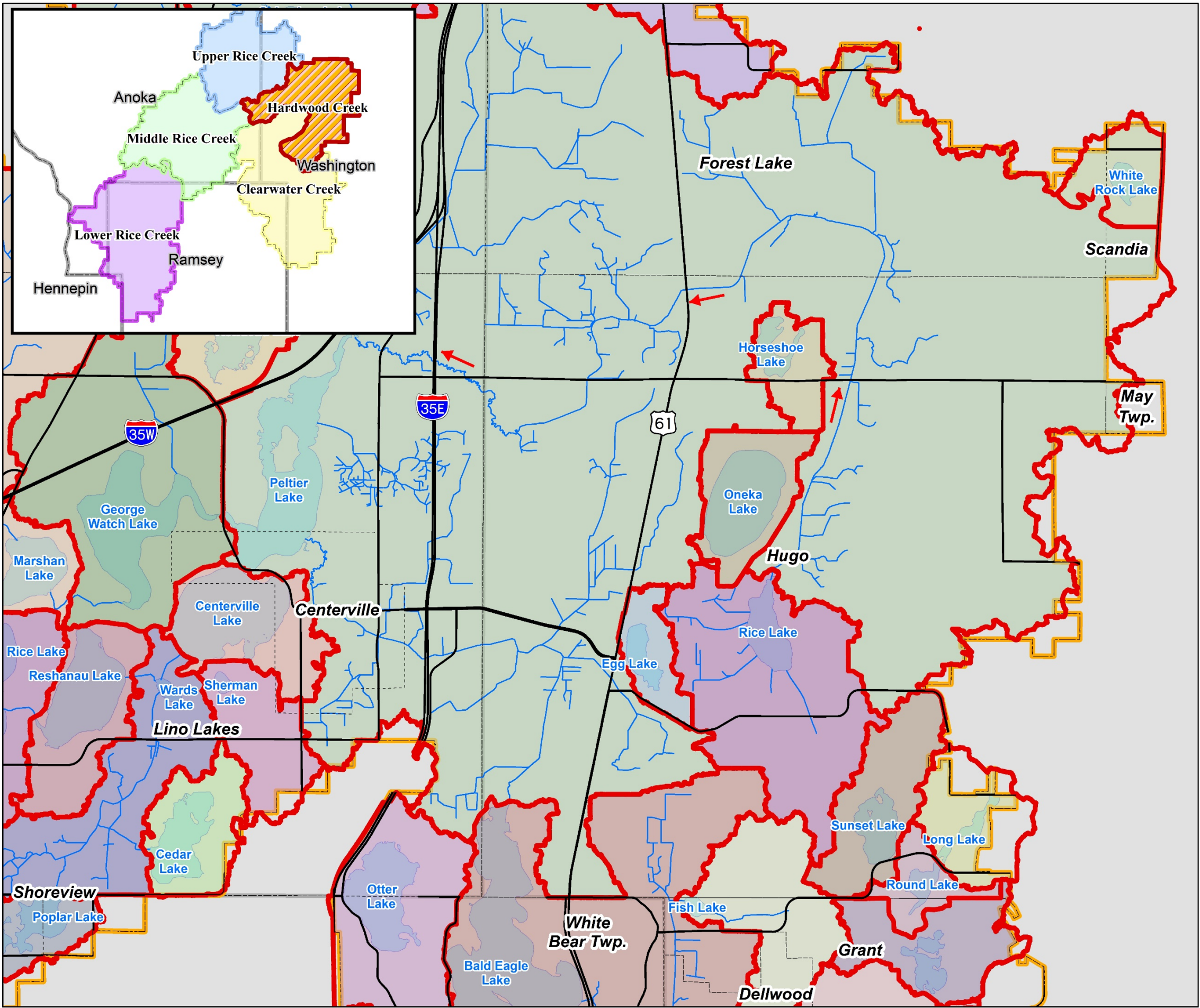
Cities

Counties

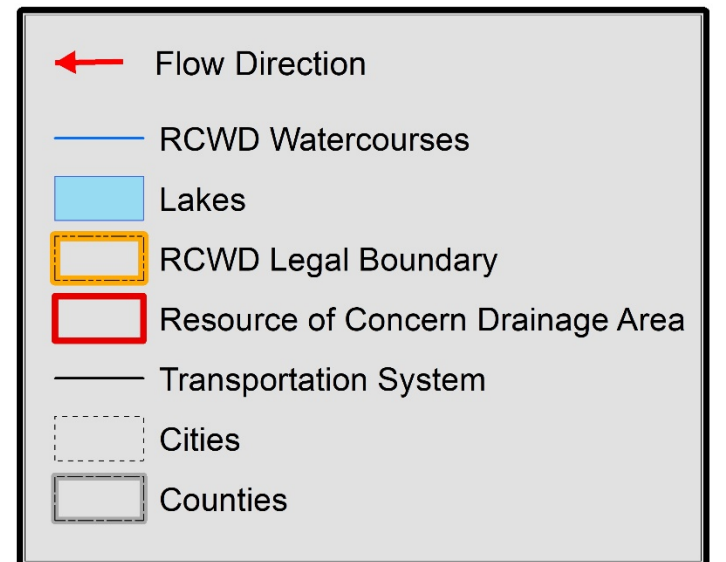
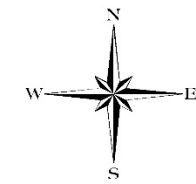


Sources: RCWD, TLG, MN DOT

**C1A: Resources of Concern
Drainage Area of Hardwood Creek**

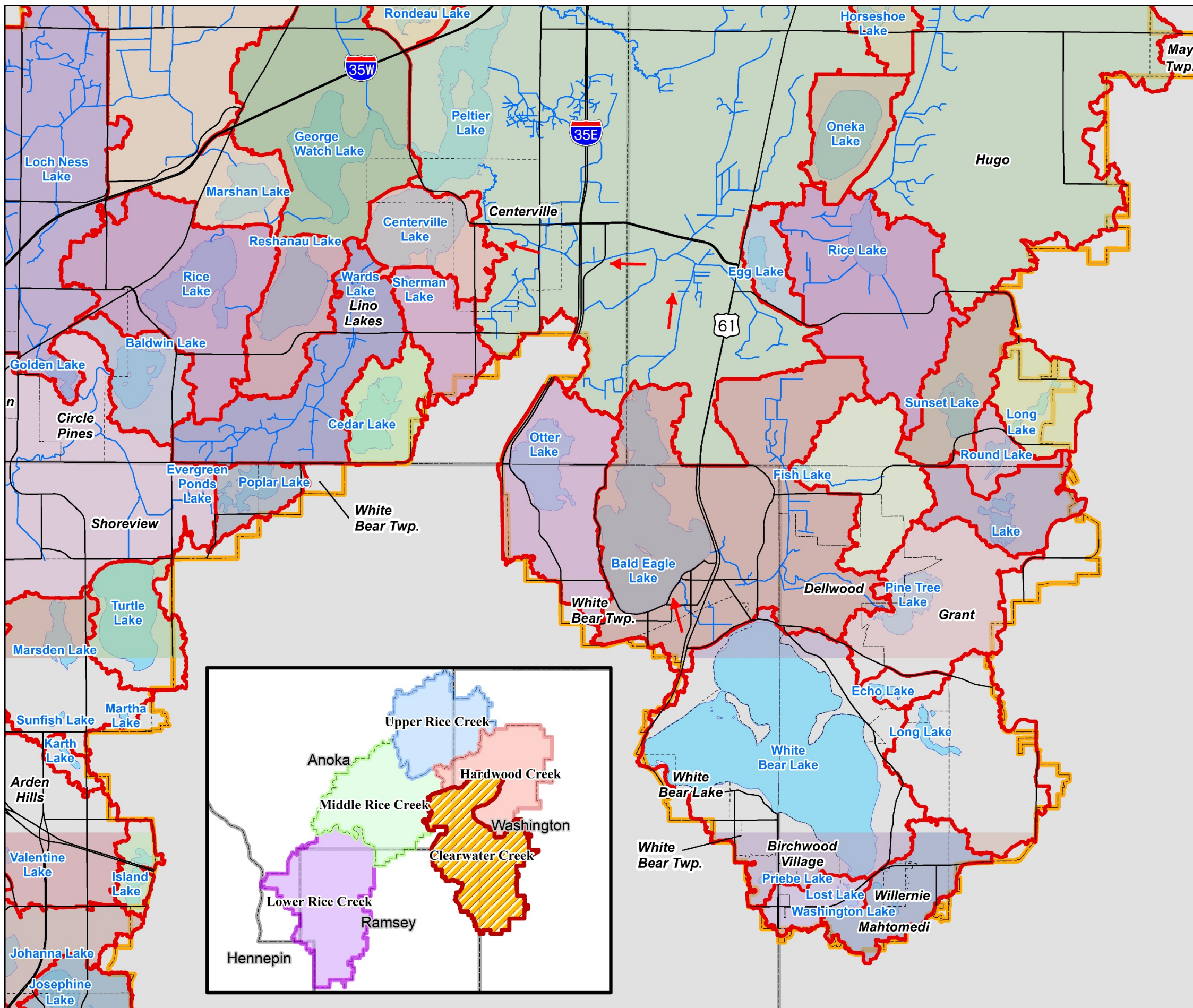


Rice Creek Watershed District

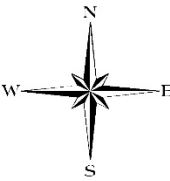


Sources: RCWD, TLG, MN DOT

C1B: Resources of Concern Drainage Area of Clearwater Creek



Rice Creek Watershed District



Flow Direction

RCWD Watercourses

Lakes

RCWD Legal Boundary

Resource of Concern Drainage Area

Transportation System

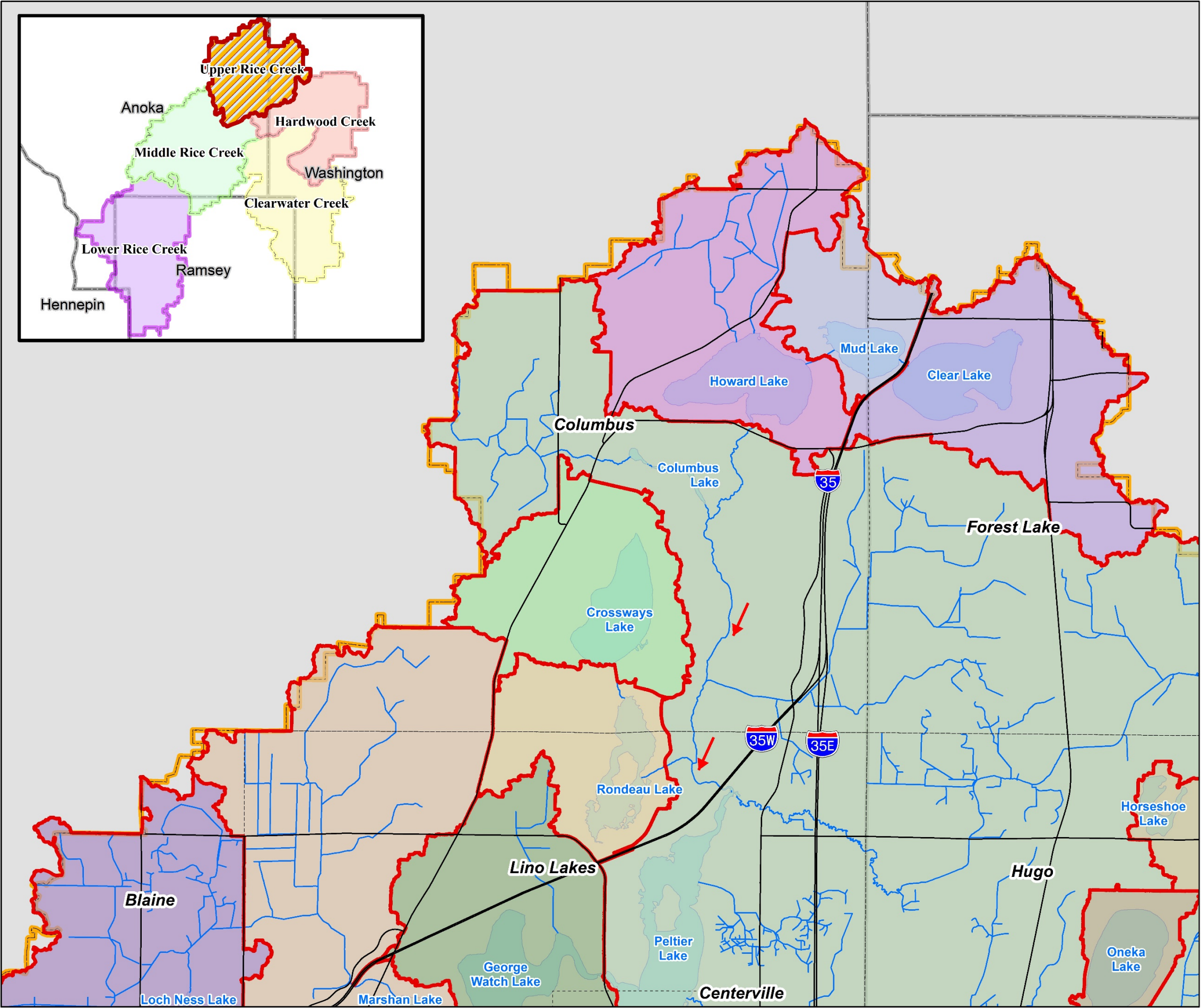
Cities

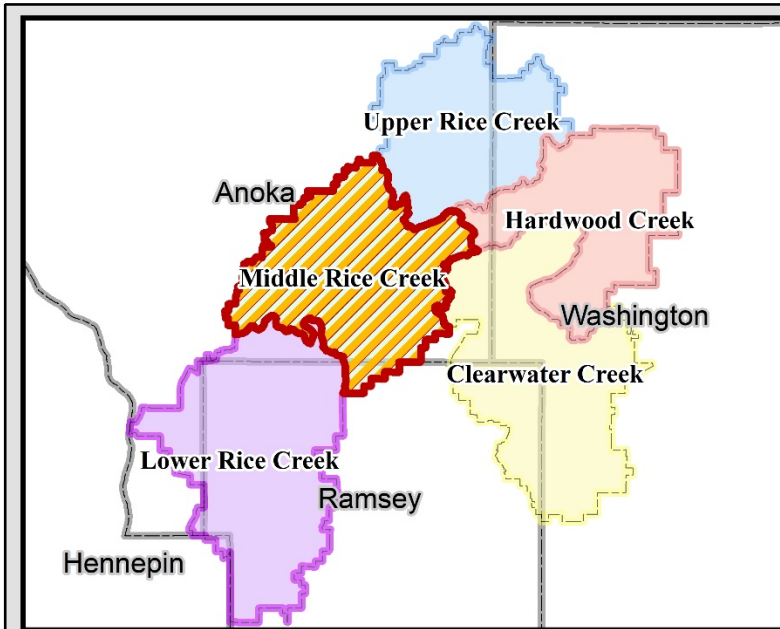
Counties



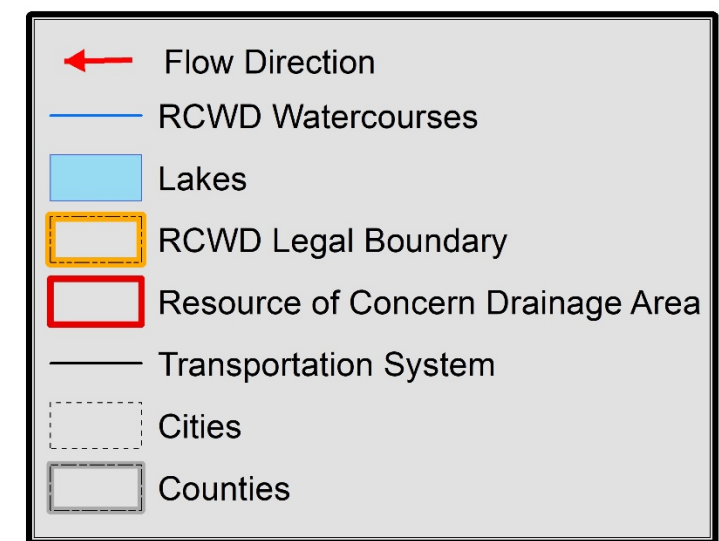
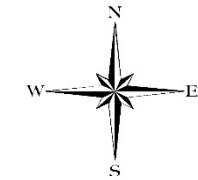
Sources: RCWD, TLG, MN DOT

**C1C: Resources of Concern
Drainage Area of Upper Rice Creek**



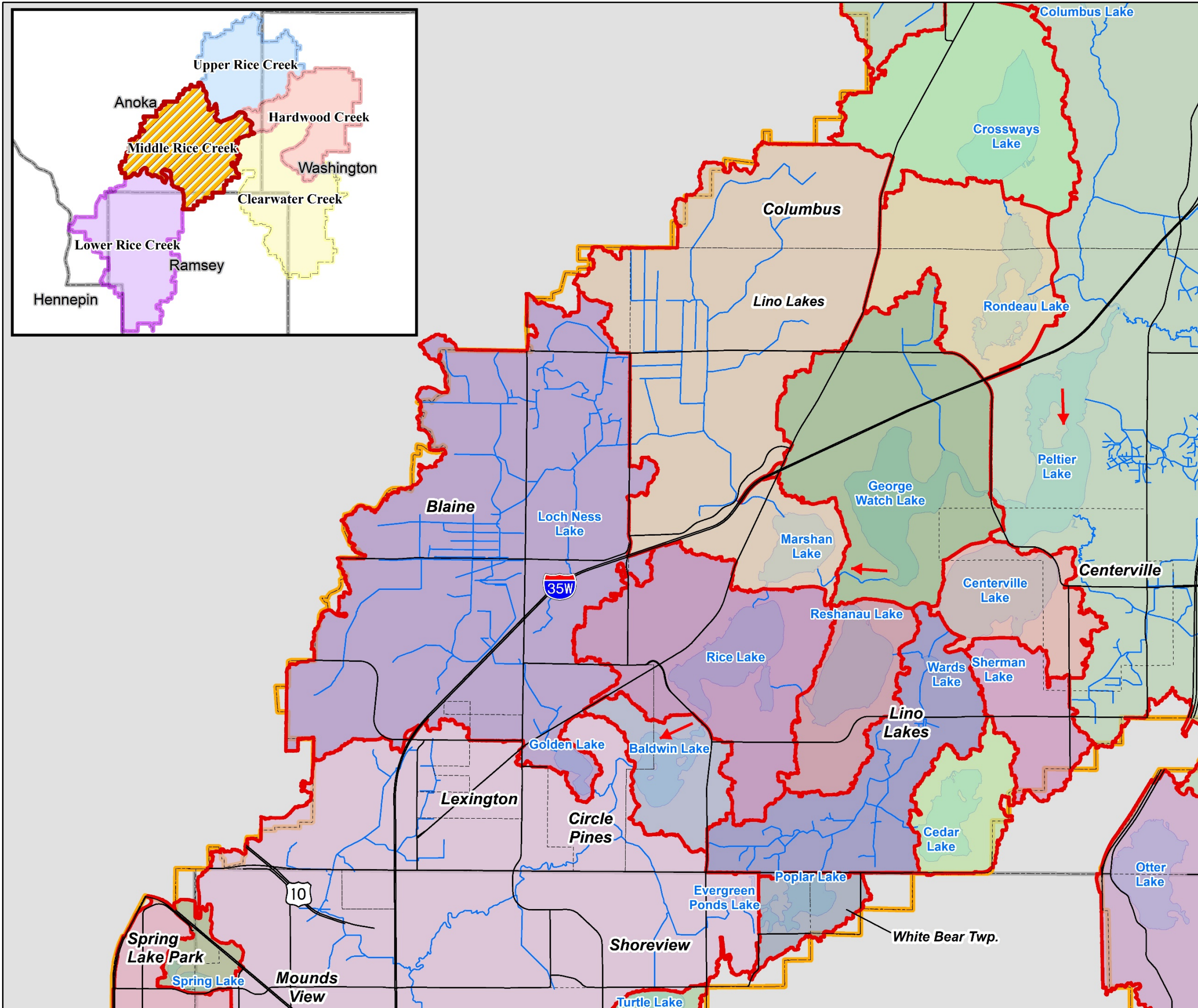


Rice Creek Watershed District

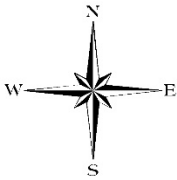


Sources: RCWD, TLG, MN DOT

**C1D: Resources of Concern
Drainage Area of Middle Rice Creek**



Rice Creek Watershed District



Flow Direction

RCWD Watercourses

Lakes

RCWD Legal Boundary

Resource of Concern Drainage Area

Transportation System

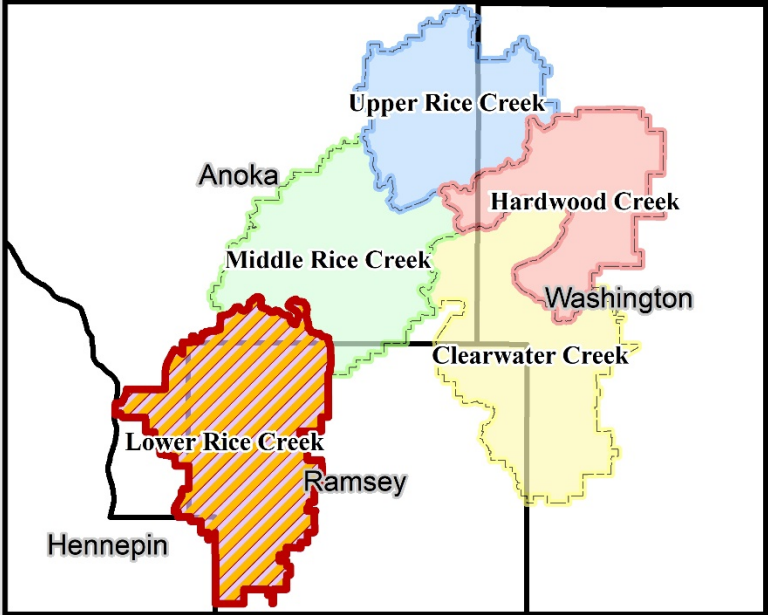
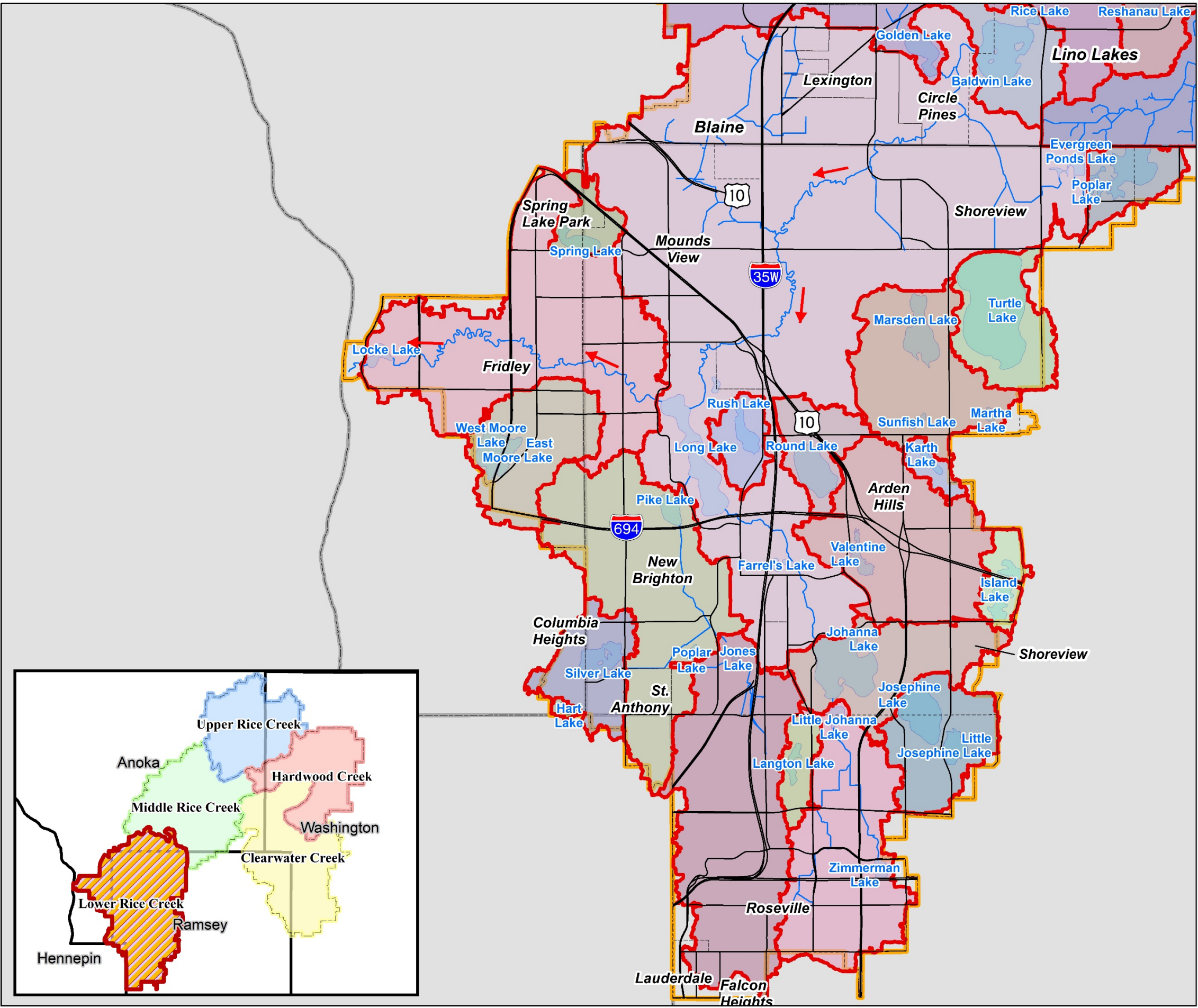
Cities

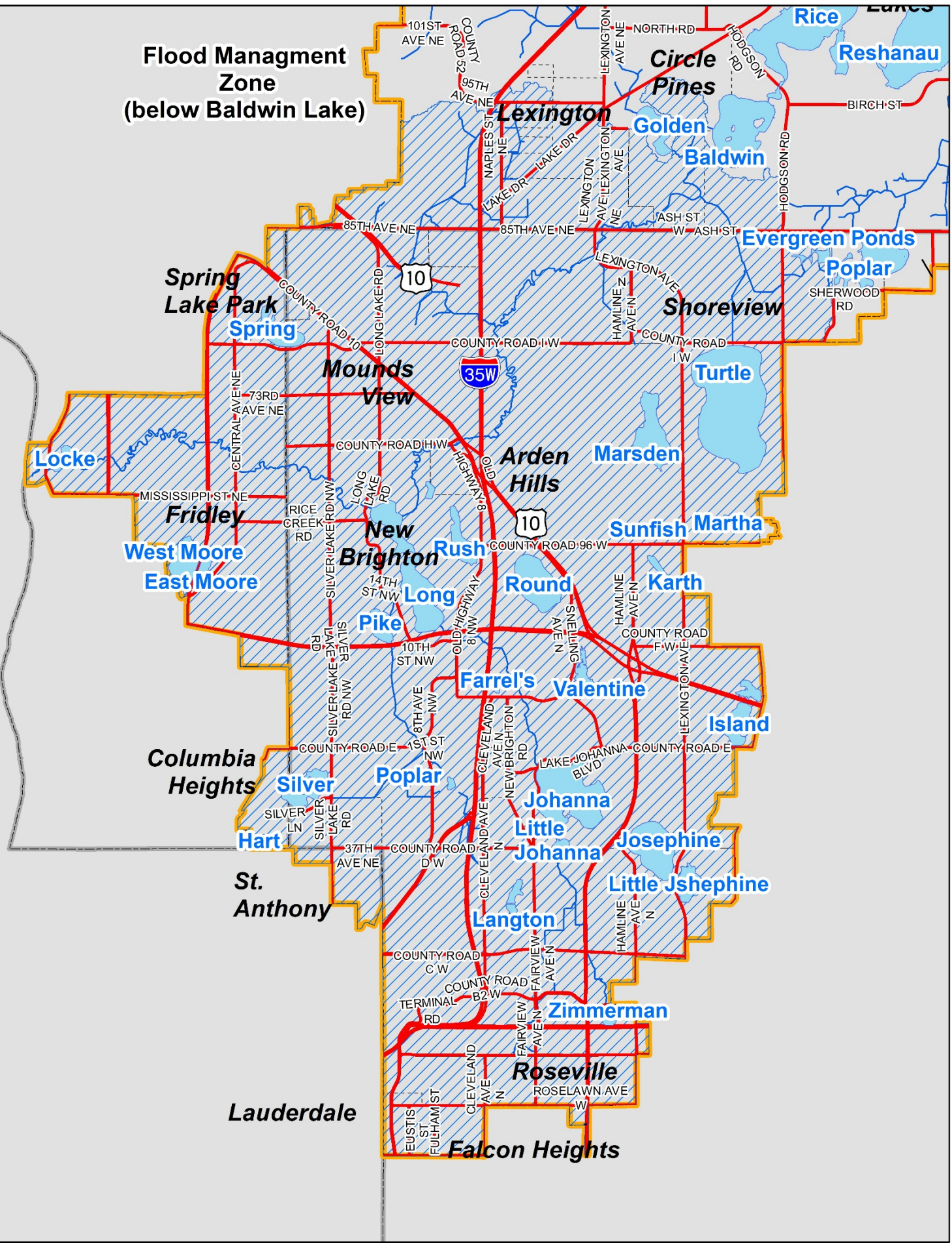
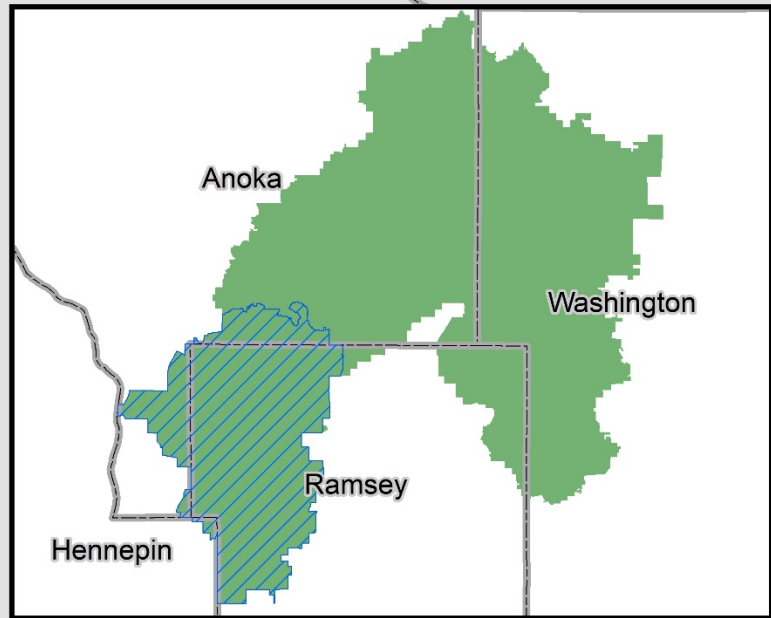
Counties



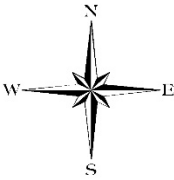
Sources: RCWD, TLG, MN DOT

**C1E: Resources of Concern
Drainage Area of Lower Rice Creek**





Rice Creek Watershed District



- RCWD Watercourses
- Lakes
- Flood Management Zone
- RCWD Legal Boundary
- Transportation System
- Cities
- Counties



Sources: RCWD, TLG, MN DOT

C2: Flood Management Zone

