Weekly LWC Update 6-23-17

ERRORS? OMISSIONS? If found, please notify **barb.huberty@lcc.leg.mn**.

Interested reader: each week, I gather general information for Legislative Water Commission members to help keep them apprised about water issues in Minnesota. This update contains a roundup of easily attainable MN water news, as well as articles from beyond MN that may inform member thinking. It also includes summaries of meetings I have monitored and reports I have read, as well as information about upcoming events. During the Legislative Session, updates on water-related legislation and committee activities are added. Any errors or omissions are inadvertent.

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LEGISLATURE

In preparation for the 6/15 LWC meeting, two session summaries were prepared:

- 1. The <u>Summary of Water Related Provision in 2017 Regular and Special Session Laws</u> compiles the water related provisions contained in all the bills that became law. Since related legislation can get advanced via a variety of bills, color-coded categories were used to create visual connections between bills. The notes at the top of the pages provide further instructions and some caveats. The hyperlinks for each bill are active for those wishing to read the exact bill language for any line item. An explanation of the acronyms is on the last page.
- 2. The ON DECK FOR 2018 document lists the bills with water-related provisions that were introduced in 2017, but that were not substantially incorporated in any of the 2017 Session Laws (excluding the remaining buffer proposals). The bills have been grouped into four, color-coded categories:
 - a) gray –proposed bond funded capital improvement requests for flood hazard mitigation; dam repairs; water supply, wastewater and stormwater upgrades; pond/reservoir rehabilitation; and drainage ditch repair. It is possible that some of these specific requests may already be in the top tier of the project priority lists for which the Public Facilities Authority was appropriated block funding.
 - b) light yellow proposed requests for pass through funding to the local level for various programs
 - c) light blue proposed legislation that deal with program operations, such as: studies/reports; equipment; task forces/councils; lake elevations; policies; and disease prevention practices
 - d) gold proposed changes in regulations or regulatory programs covering a wide variety of issues, including: pipelines; mining; sewer availability charges; funding approaches; drainage; rules/standards/environmental & peer review; pesticides; nonwoven product labeling, etc.

MN NEWS

WATER ACTIONS

- MDH: <u>Brownfield and Health Tool gives blighted sites across the state a healthy second chance City of Duluth first to use new tool in revitalization efforts</u>; brownfield sites often require surface water or groundwater remediation prior to redevelopment
- Strib: Booklet about St. Croix River regulations helps landowners go with the flow

- WCCO: <u>Good Question: When Should You Water Your Lawn?</u>; once per week between 4 & 7 a.m. should suffice
- International Falls Journal: <u>State plans for changing climate</u>; Hometown Focus: <u>State of Minnesota plans for changing climate—warmer, more precipitation</u> [see the link to the report in the New Reports section, below]
- Sun Current: City joins program offering homeowners insurance against water, sewer problems
- MinnPost: Minnesota models: collaborating locally across sectors and interests for a better environment [check out the Hutchinson award which capitalized on the (waste)water energy nexus]
- Winona Daily News: Winona to use statewide program to measure environmental progress
- Governor Dayton's Office: new BWSR board appointment:

Duane Willenbring – St. Cloud, MN Non-Metropolitan Elected City Official

Effective: June 18, 2017, Term Expires: January 7, 2019

Replacing: Douglas Erickson

WATER BUSINESSES

Strib: Ecolab has tool to help companies conserve water, meet environmental goals

SURFACE WATER/STORMWATER

- MPR: <u>Some new work in the Sculpture Garden is truly deep</u>; using stormwater for irrigation and restoring marsh vegetation are just 2 of the water management techniques added to the garden
- Inforum: Reservoir embankment's potential to collapse poses new hurdle for Red River Valley Water Supply Project
- Brainerd Dispatch: New squad of AIS detectives about to hit the streets -- er, lakes
- Strib: Is your favorite Minnesota lake or river on the impaired waters list?
- MPCA: Pomme de Terre River water quality shows slight improvement, more testing under way
- ABC5: <u>DNR Strips Public Status from 640 Miles of Minnesota Streams</u>; <u>Duluth News Tribune</u>:
 <u>Environmental group challenges Minnesota DNR stream action</u>; <u>KAAL TV</u>: <u>DNR Strips Public Status from 640 Miles of Minnesota Streams</u>; <u>Faribault.com</u>: <u>Rice County creek included in challenge to DNR stream action</u>; <u>Park Rapids Enterprise</u>: <u>Minnesota environmental group challenges DNR stream action</u>
- BWSR: <u>Improving water quality for multiple benefits</u>; the Downtown Chanhassen BMP Retrofit Assessment shows how that can be done
- BWSR: Targeting the Chisago Chain of Lakes: Improved Lakes, Improved Communities
- BWSR: Cascading success: On a former golf course, a Rochester stream, floodplain restoration
- Duluth News Tribune: <u>Five years after 2012 flood, is Northland better prepared for next natural disaster?</u>; Strib: <u>Duluth's record-setting rains led to harrowing tale</u>
- Strib: Legislature funds \$6 million in updates to Dakota County's Byllesby Dam
- Pine and Lakes Echo Journal: <u>Project aimed at cleaning Upper Mississippi River</u>
- Mankato Free Press: Council backs \$14M water quality initiative
- Pilot Independent: MPCA, local partners finishing first statewide check-up of lakes & streams
- Faribault.com: Being green: Fire Department's rain garden soaks in storm water
- DNR: <u>Infested Waters List</u> has been updated; see spreadsheet lists or interactive maps to see if your area is affected
 - Waseca County News: <u>City, county officials meet with Environmental Quality Board about climate change impacts</u>; the Region 9 Development Commission reports can be found here: <u>Climate Change Vulnerability Assessment & Adaptation Plan</u>
- Mankato Free Press: Experiment the latest in Crystal Lake water improvement

- Brainerd Dispatch: Taking on starry stonewort's opening act
- Met Council: <u>Council Awards \$1 Million for Stormwater Management Projects</u>; 8 of 11 projects funded; \$700,000 unmet need left on the table
- Post Bulletin: <u>Next meeting on Corps dredging plan set for Thursday night</u>; Mississippi River dredging faces high costs and difficult storage hurdles
- West Central Tribune: Minnesota River Congress Staying The Course For Clean Water Goals
- St Peter Herald: Community conversation focuses on Middle Minnesota River

GREAT LAKES

- MPR: Troubled Waters: Trump budget casts Great Lakes cleanup into doubt
- Pioneer Press: Great Lakes water levels this summer expected to be highest in decades
- KAALTV: Health Officials Say Well Owners Should Regularly Test Water
- Great Lakes Commission: <u>Blue Accounting launches collaborative effort to protect Great Lakes source</u> water
- Cleveland.com: EPA chief says he wants clean Great Lakes despite seeking cuts
- InfoSuperior: Lake Superior Makes Legal History; a look back at the Reserve Mining case
- Cleveland.com: Great Lakes aren't doing so great, says new government study; except for Superior



• Duluth News Tribune: Congress wants Great Lakes carp protection plan released

WATER SUPPLY

- MPR: Is your well water poisoning you? Better test it
- The Globe: <u>Dayton celebrates funding for water pipeline to Worthington</u>; KSFY: <u>Minnesota governor gets update on Lewis and Clark water project</u>; US News: <u>Contract Awarded for Lewis and Clark Pipeline Project</u>
- Lillie News: Work delayed at TCAAP site as pollutants linger
- Pipestone Star: Council greenlights new water plant
- MDH: <u>Contaminants of Emerging Concern Program Nominated Contaminants Status Table (November 2016)</u>
- Pioneer Press: 3M to shoulder cost of cleaning up Cottage Grove's drinking water

WASTEWATER

- Strib: A rat in the house? It may have come up from the St. Paul sewers
- U of MN: U of M wastewater treatment pilot promises to turn scum into profit
- Mankato Free Press: Thriving Madelia pond transformation leads the way for other cities
- Met Council: Human Noses Critical for Odor Control at Wastewater Facilities

AG & WATER

- Winona Post: State aims to regulate nitrogen fertilizer
- MDA: MDA announces 2017 Clean Water Fund research projects

- MPR: <u>Details released for shrimp operation in southwest Minnesota</u>; KSOO: <u>Luverne Gets Shrimp Production Facility</u>; Marshall Independent: <u>Marshall picked for tru Shrimp operations</u>; The Globe: <u>Luverne celebrates trūShrimp announcement</u>
- CSR Wire: Cargill Announces Progress on Aqua Nutrition Sustainability
- Successful Farming: Minnesota Farmer Dave Legvold Preaches Restorative Farming
- AgriNews: <u>Two states, two stories</u>
- UPI: Study: <u>To save planet, humans must alter diet and farming methods</u> [see the link to the research paper in the New Reports section, below]
- Austin Daily Herald: <u>Buffer compliance regulation staying local</u>; Brainerd Dispatch: <u>Crow Wing County rebuffs buffer enforcement</u>; Bemidji Pioneer: <u>Beltrami Commissioners opt to administer buffer law program</u>; Echo Press: County getting state aid to enforce buffer law
- EurekAlert!: <u>USDA announces more than \$9 million to address critical water resources issues</u> including a \$458,043 award to the U of MN St Paul in the category "Understanding Decisions and Behaviors Connected with Agriculture and Post-harvest Processing Industry Water Use"
- KTIC: Opening Statement by Agriculture Committee Ranking Member Collin C. Peterson; "Watershed programs are an incredibly important part of the conservation toolbox."
- Whapeton-Breckenridge Daily News: <u>Residential valuations up 6 percent in Wilkin County</u> [article
 includes information on the "other waters" mapping requirement from the buffer law and the buffer
 enforcement decision]

EXTRACTIVE INDUSTRIES

- Strib: Minnesota musicians rally in new song to protest proposed PolyMet mine
- Strib: <u>Indian tribes</u>, <u>business leaders make their cases in Enbridge Line 3 debate</u>; Grand Rapids Herald Review: <u>Northern Minnesotans Concerned over Proposed Line 3 Replacement Pipeline</u>; Aitkin Age: Public comments on Enbridge Line 3 environmental impact statement
- Duluth News Tribune: <u>Nolan leads Republican lawmakers on mining tour</u>; Brainerd Dispatch: <u>Battle</u>
 escalates over mining moratorium near Boundary Waters; Timberjay: <u>Nolan finds GOP allies in quest</u>
 to block mining study
- Polymet Mining: <u>PolyMet Reports First Quarter Fiscal 2018 Results</u>
- Ely Echo: Range meeting set on mining withdrawal; federal USFS & BLM officials will hear public testimony on the proposed 20-yr mining ban on over 234,000 acres of public land in NE MN on T, 7/25, from 4:30 to 7:30 pm in the Virginia high school auditorium; the week before on T 7/18, a similar meeting will be held from 4:30 to 7:30 pm at the Saint Paul River Center (175 West Kellogg Blvd, Suite 501)
- DNR: <u>State Nonferrous Metallic Mineral Leasing Public Lease Sale</u>; Duluth News Tribune: <u>Mining</u> exploration spreading across northern Minnesota

Duluth News Tribune: Nolan leads Republican lawmakers on mining tour

OPINIONS

- The Globe: Editorial: Worthington's big water win
- Duluth News Tribune: Reader's View: Minn. waterways lose in Trump budget
- Pioneer Press: Soucheray: The old-timers on White Bear called this, by the way
- MinnPost: Enbridge's Line 3 crude oil pipeline: nothing but trouble for Minnesota
- The Globe: Scott Rall: Efforts on behalf of water are in full swing
- Duluth News Tribune: Local View: Minnesotans could be left holding the bag after mining
- Brainerd Dispatch: Volunteer: It's a good year to become a water monitor
- Echo Press: Commentary: Water wells are safe
- Whapeton-Breckenridge Daily News: Defending Richland-Wilkin Counties
- Twin Cities Agenda: Shrimp farming in Minnesota?

BEYOND MINNESOTA

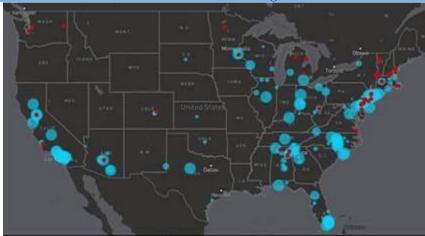
REGIONAL

- MPR: 5 people, including Michigan health chief, charged in Flint
- Homeland Security Newswire: <u>Helping repair California's water infrastructure</u>; Cal state provides hands-on training to put their graduates in high demand for water industries
- MPR: <u>Judge won't allow Trump to be added to pipeline lawsuit</u> and <u>Judge: Redo part of analysis for Dakota Access pipeline</u>
- Strib: Reservoir water weight blamed for Arkansas earthquake swarm
- Strib: Assembly panel scales back lead pipe replacement program in WI
- Strib: Contaminated wells may cause Wisconsin residents to get sick
- prweb: GrayMatter and DC Water Launch Smart Drinking Fountains
- phys.org: Simple tactic results in dramatic water conservation, study shows
- Bloomberg: <u>Hamptons Tainted Water Lawsuit Adds to Slew of 3M Complaints</u>; Bucks County Courier Times: Dangers of firefighting foam discussed in 2001, document shows
- Denver Post: <u>EPA chief looking "closely" at dropping storm-water lawsuit against Colorado Springs,</u> says Rep. Doug Lamborn
- NWF: Seven Years Later, Kalamazoo River Oil Spill Cleanup Still Ongoing
- Circle of Blue: California Hones Drinking Water Affordability Plan

NATIONAL

- WAMU: Wet Wipes Industry Asks Congress To Flush D.C. Effort To Set Standards For Bathroom Wipes
- Business Wire: <u>Technological Advancements in Precision/Smart Agriculture 2017 Research and Markets</u>
- NACWA: NACWA Provides Initial Feedback on EPA Effort to Redefine WOTUS
- NACWA: NACWA Pushes Back on Proposed Cuts to Wastewater Funding Programs
- Pioneer Press: Climate change raises new risk: Are inland bridges too low?
- Strib: Investigators: EPA had no rules for working at risky mines
- Strib: Pipeline beneath Straits of Mackinac passes pressure tests
- Amiad Water Systems: <u>Putting Mussel Behind Treatment Plant Filtration</u>; zebra mussel populations in the Mississippi River could pose a similar intake problem for surface water providers in St Cloud, St Paul, and Minneapolis
- E&E News: EPA reissues Obama's dental office mercury rule

- Next City: <u>New Design Guide Offers Stormwater Solutions</u>
- EPA: <u>Evaluation of EPA's Controls Over Land Application of Sewage Sludge</u>; EPA's inspector general is investigating EPA's oversight of sewage sludge land spreading
- Water Online: Toxic Nonstick Chemicals Contaminate Drinking Water For 15 Million Americans



- Science Daily: PFOA threat to drinking water addressed with novel material
- The Washington Post: <u>EPA plans to buy out more than 1,200 employees this summer</u>; this is about 8% of its workforce
- Strib: U scientists say Trump is overhauling EPA advisory panel

GLOBAL

- Water: Strategic drought risk management 8 golden rules
- New Scientist: Billion-dollar dams are making water shortages, not solving them
- Phys.org: Reducing water use in agriculture

MEETINGS

LITTLE ROCK CREEK

DNR is preparing a groundwater management plan that will outline tasks that they will complete to be better informed when making appropriation decisions in the Little Rock Creek area, an area north of St Cloud with a large amount of irrigated farming. The purpose of the June stakeholder meeting was to discuss DNR's progress in developing the plan, including water modeling, and to share their approach for releasing the plan.

In December, DNR shared their preliminary groundwater (shallow aquifer) modeling results, which showed that pumping groundwater reduced average stream flow by 2.6 cfs. Based on input received at the February meeting, DNR is now refining the model to include a "recharge model" that addresses what is happening at the ground surface, including how water percolates through area soils and the impact of evapotranspiration based on temperatures and crop types. Stakeholders expressed concerns about the absence of a pre-development scenario, a lack of data on the impact more trees has on the water supply, which data sources were used to populate their model, how inputs into the system have changed over the last 10 years, how upstream drain tiling and irrigation are impacting the flow regime, and what cumulative impacts result from water users below permit thresholds. Irrigators want strategies other than reduced appropriations to be considered, such as conservation, raingardens, and adaptive irrigation management.

DNR intends to manage appropriations according to base flow depletion during the low flow times of year, which are during August & September. The appropriate index measure is median flow, not average stream flow, since those are the flows that aquatic life experience.

Over the next 2 years, DNR intends to continue collecting stream flow data and site-specific fish habitat association data, analyze habitat changes with flow conditions, and stream temperatures, in addition to refining the groundwater flow analysis (time of travel).

When DNR decides what evapotranspiration assumptions they will use, they will rerun the model to produce a final set of results that can be shared with the technical advisory team for peer review. This team includes state and federal agency staff, as well as private consultants.

Two weeks prior to their last meeting on 7/26, DNR will share a copy of the draft plan (~20 pages) and implementation schedule to members of the stakeholder team for review and comment. DNR emphasized that the plan will not contain allocation decisions, a plan to deal with individual appropriations, or a protective stream flow. Regarding enforcement, DNR intends to utilize the same process here that they use throughout the state, applying regulations uniformly. Monetary penalties are not envisioned in the short term, but DNR may establish water rations, if needed. The plan will have other management activities, monitoring, analysis and procedures to help determine whether rations are needed and what steps would be used to get there if needed.

CWC

At this month's Clean Water Council meeting, Luke Stuewe (MDA hydrologist) gave an update on the Byron Township Water Quality Study. This multi-partner, public-private study is looking at nitrogen loss below irrigated row crop production at land newly converted from managed timber (in 2013). Byron Field #1 is a 140-acre field (of 1,000 acre production complex) located north of Staples, MN. Monitoring at this site includes: lysimeters (measure concentrations in soil water at a depth of 4.5'), drain gauges (measure soil moisture flux), and surficial groundwater monitoring well nests. The collected nitrogen loss data is being used to evaluate land use conversion impacts when low-nitrogen crop rotations (i.e., seed potatoes/rye cover, soybeans/rye cover, rye crop/rye cover, field pea/pea cover) are used, along with optimizing agronomic nitrogen best management practices (e.g., the 4Rs - rate, timing, product, & placement - of fertilizer, irrigation scheduling, and use of cover crops). After 3 full cropping seasons, the soil moisture data to date shows average NO₃-N is higher under corn (max 50 ppm) as compared to soybeans (max 30 ppm), as compared to the drinking water standard of 10 ppm. Groundwater flows from SE to NW with a 9.5' water table drop in elevation across the irrigated field. This area is in Pesticide Monitoring Region 4 and 75% of the Byron field data is below the median concentration (~18 ppm) for PMR4 in 2015 – 2016.

Other topics discussed at the June meeting can be found in the CWC packet and WebEx archive located here.

LCCMR

This past session, a provision was added to the statue governing the work of the Legislative Citizens Commission on MN Resources requiring: "For fiscal year 2019, the commission shall consider recommending loans from the corpus of the trust fund to statutory and home rule charter cities and towns with a population less than 5,000 as provided in the Minnesota Constitution, article XI, section 14. The commission shall work with the Public Facilities Authority in developing its recommendations. The commission shall include in its recommendations an analysis of using trust fund allocations for grants to the same cities and towns, including any necessary statutory changes." At their meeting this week, the LCCMR members reviewed the past appropriations for research on wastewater, drinking water and other water contamination (see the linked documents in item 5 of the 6/21 agenda). Members discussed various ways of proceeding with this provision, from gathering advice from the U of MN, PFA, and LMC to asking House and Senate research staff to provide additional background and a legal assessment to forming a subcommittee to develop recommendations. A request was made to evaluate capital investment and O&M costs over the life of a variety of systems on a per capita basis. There was a concern expressed regarding the addition of another eligible expenditure category and its effect on LCCMRs ability to fund they types of projects already outlined in the constitution. Ultimately a

motion was adopted to create a subcommittee of 3 to 6 members to develop recommendations for the full LCCMR to consider this fall or winter.

CWC POLICY COMMITTEE

In their monthly effort to learn about water policy issues, the CWC Policy Committee members learned about the policy recommendations in the 2017 *State of the River Report* produced by the Friends of the Mississippi River and the National Park Service. Their recommended water-related policy action areas advocate:

- promoting perennial cropping systems
- improving chloride management
- implementing comprehensive drain tile reform
- establishing nitrate standards
- advancing microplastics research
- improving fertilizer management
- developing a statewide pharmaceutical management plan

BWSR staff gave an update on the Working Lands Watershed Restoration Program. A stakeholder group has been convened to address the 11 elements set forth in the 2016 legislation, from which an interim report will be issued in October and a final report will be completed by 2/1/18. Work over the last 6 months has concentrated on determining how to select priority watersheds, finding complementary state programs, and how to model water quality improvements. Ultimately two watersheds will be selected to pilot an implementation approach, but at this time, 6 minor watersheds being considered:

- 1. Shakopee Creek within the Chippewa River watershed
- 2. Buffalo River watershed
- 3. Sauk River watershed
- 4. MN River Mankato watershed
- 5. Le Sueur River watershed
- 6. Root River watershed

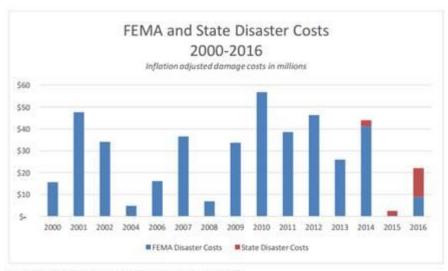
REPORTS

STATE OF MN WATER

- DNR: MN Stream Flow Report 6/19/17; normal and high flows throughout the state
- National Drought Mitigation Center: 6/20/17 MN Drought Monitor; some easing of drought and dry conditions in NW MN this week (from 6/9, WCCO: DNR: Drought Returns, Worst In 2 Years)
- DNR: Hydrologic Conditions Report May 2017 [be sure to check the maps on pages 5 & 6]

NEW REPORTS

- John Carroll University: <u>Status of Infrastructure Related to Crude Oil Transportation in the Great</u> Lakes/St. Lawrence River Region
- IOP Science: <u>Comparative analysis of environmental impacts of agricultural production systems</u>, agricultural input efficiency, and food choice
- Water Research Foundation: New Report on Short-Term Water Demand Forecasting
- MPCA: Adapting to Climate Change in Minnesota 2017 Report of the Interagency Climate
 Adaptation Team; MPCA: State of Minnesota plans for changing climate; Timberjay: Climate challenge
 Report: State needs action to reduce carbon emissions, adapt to environmental changes



Sources: https://www.fema.gov/states/minnesota and HSEM

UPCOMING EVENTS

- June 28: Soil health field day; 9:30 am-4:30 pm; West Central Research and Outreach Center (46352 MN Hwy 329, Morris); free; details here
- July 25: MN 4R Technology Review Field Day; 9 am to 3 pm; Dave Legvold Farm (5103 315th St W, Northfield); free; agenda & registration link here
- July 31: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Rochester Rochester Community and Technical College Heintz Commons, details here
- Aug 1-3: Farmfest; more information here
- Aug 7-9: WaterWorks! Drinking Water Institute for Educators; Lakeville; details <u>here</u>
- Aug 16: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Mankato MN State University, details here
- Aug 17: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Marshall SW MN State University, details here
- Aug 22: MN Technical Assistance Program Intern Symposium; U of MN McNamara Alumni Center; more info here
- Sept 5: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Crookston U of MN Crookston Bede Ballroom, Sargeant Student Center, details here
- Sept 6: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, St Cloud St Cloud Community and Technical College Cafeteria, details here
- Sept 12: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Ely, details to come here
- Sept 13: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Bemidji, details to come here
- Sept 19-20: Great Lakes Commission Annual Meeting; Duluth Entertainment Convention Center; more details to come
- Sept 26: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Minneapolis, details to come here
- Oct 4: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Burnsville Diamondhead Education Center, details here
- Oct 5: "25 by 25" Water Quality Town Hall, 6:30 8:30 pm, Maplewood, details to come here
- Nov 1-3: BWSR Academy Cragun's Conference Center; Brainerd; registration to come in August
- Dec 4-5: MASWCD 27th Annual Trade Show & Conservation Information Fair; Doubletree by Hilton Hotel Bloomington-Minneapolis South; more info to come