Indian Creek Watershed-based Planning

CMAP Environment & Natural Resources Committee

Jan. 7, 2021

Watershed

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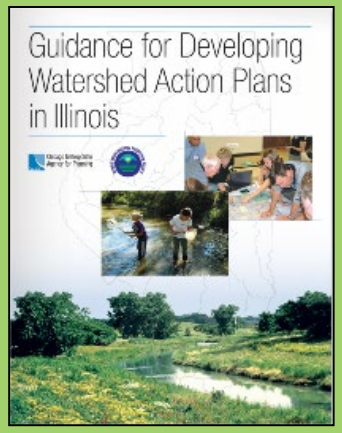
Why Watershed-based Planning?

- **Federal Clean Water Act**

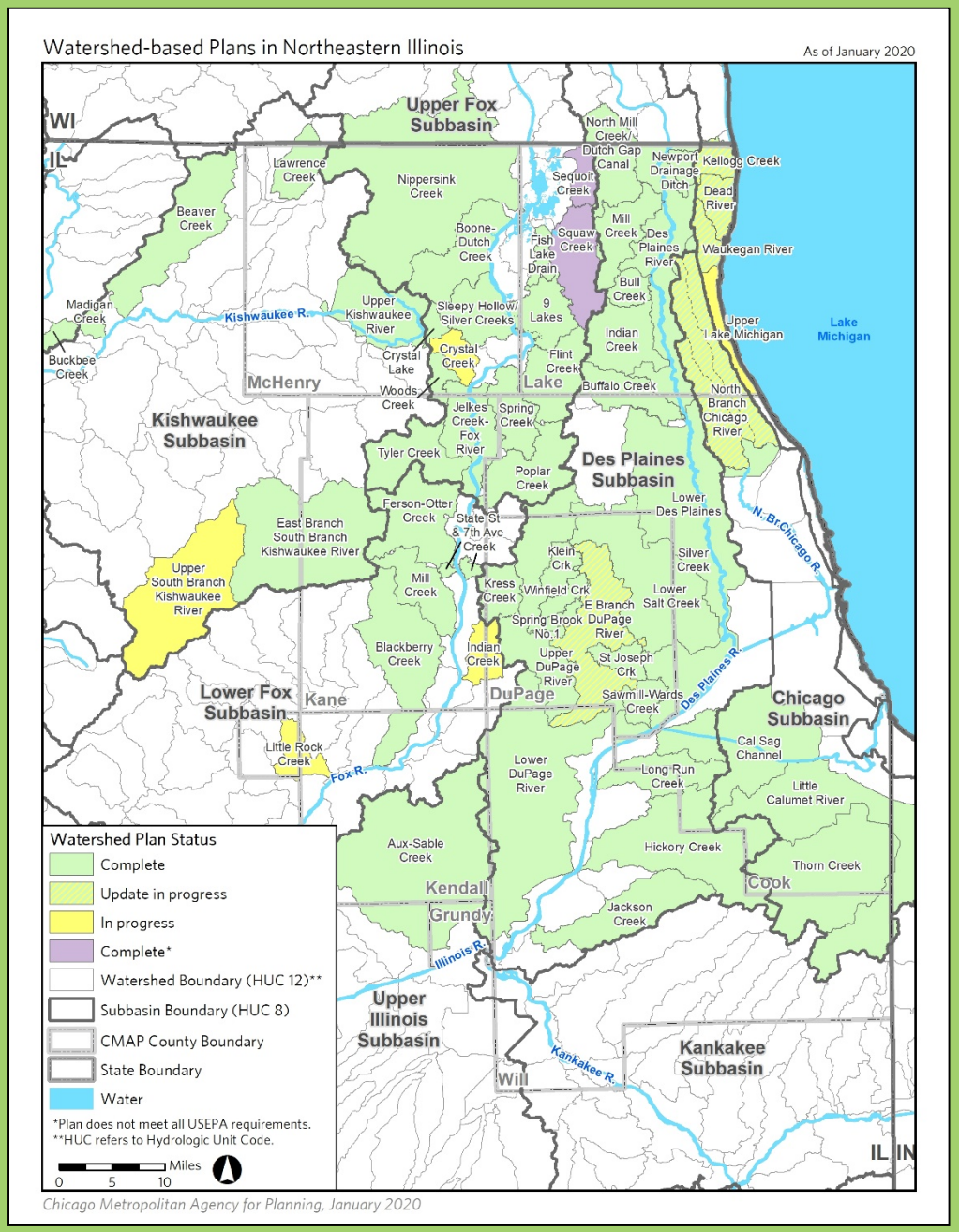
  - Section 305(b), 303(d)
  - Section 319(h): Nonpoint Source Management Program
    - 9 Minimum Elements of a Watershed-based Plan (U.S. EPA, Illinois EPA)
      - implementation



- **Regional Planning (CMAP)**
  - Areawide Water Quality Management Plan
    - CWA Section 604(b) – WQ Management Planning
  - Go To 2040 → On To 2050
  - Water 2050

- **Local Planning, Initiatives, Programs**

Why Indian Creek?



http://www.cmap.illinois.gov/programs/water/water-quality-management/watershed-planning

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U.S. EPA's 9 Minimum Elements of a Watershed-based Plan

a) Identify causes of impairment & sources of pollution
b) Estimate pollutant load reductions needed to meet WQ standards
c) Identify the NPS management measures needed to achieve load reductions
d) Estimate amount of technical & financial assistance needed, and sources & authorities
e) Provide a public information and education component
f) Include a schedule for implementing the NPS management measures
g) Describe interim, measurable milestones to measure progress
h) Establish criteria to determine if load reductions being achieved
i) Provide a monitoring component to determine if progress being made toward attaining or maintaining WQ standards

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Watershed-based Plan Focus

address Nonpoint Source (NPS) Pollution to restore and protect impaired waters

Watershed Planning Co-benefits

- Open space and habitat protection
- Flood control
- Safe, adequate water supply
- Smart growth

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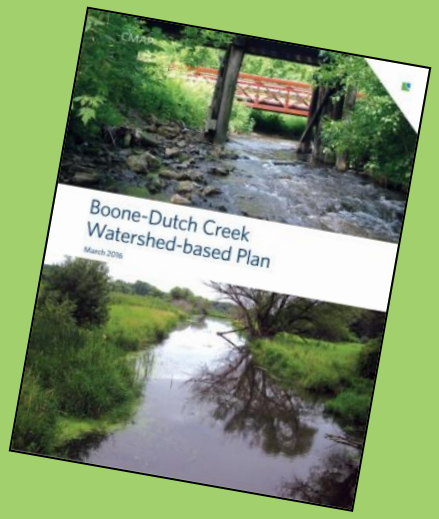
Watershed Planning Steps

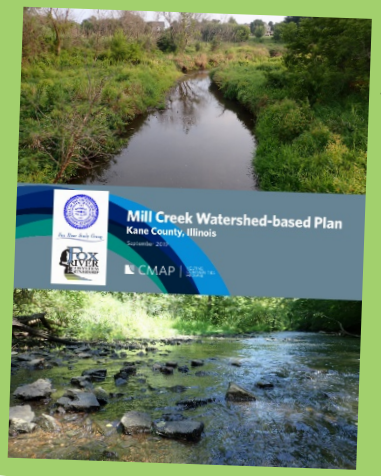
From *Handbook for Developing Watershed Plans to Restore and Protect our Waters* (USEPA, 2005)

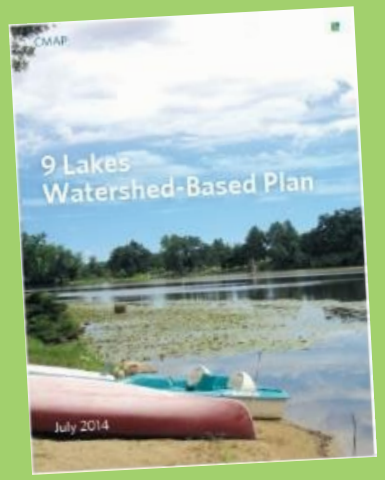
Watershed planning is a collaborative, iterative, and adaptive process…

Watershed-based Plan Outline

1) Introduction
2) Watershed Planning Area O'view
3) Watershed Resource Inventory (WRI) *
   - Local Governments and Districts
   - Population and Demographics
   - Physical and Natural Features
   - Land use and Land Cover
   - Water Resource Conditions
   - Pollutant Sources, Load Modeling
   - Land and Water Management Practices
   - Previous Watershed Planning and Implementation Activities







Watershed-based Plan Outline *cont.*

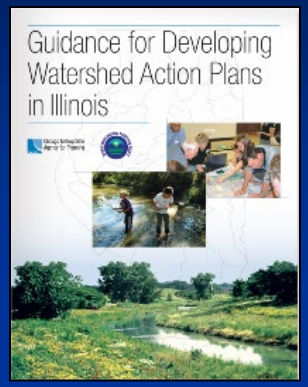
4) Watershed Protection Measures
   - Planning, Policy, and Programming
   - Best Management Practice (BMP) Implementation Projects
     - *"watershed-wide"*
     - *site-specific*
   - Public Information and Outreach
   - Funding and Tech Assistance
   - Ecosystem Services Evaluation
5) Monitoring Success
   - Implementation Schedule
   - Criteria for Determining Progress
   - Monitoring to Evaluate Effectiveness

- Appendices *

Watershed Planning Resources

Guidance for Developing Watershed Action Plans in Illinois (CMAP & IEPA, 2007)

link on this page:
https://www.cmap.illinois.gov/programs/water/water-quality-management/watershed-planning

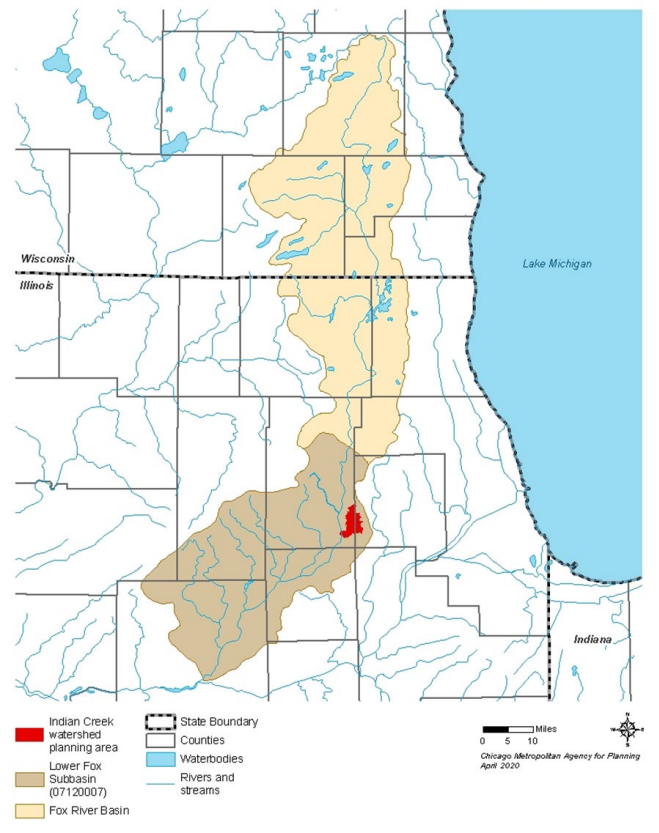


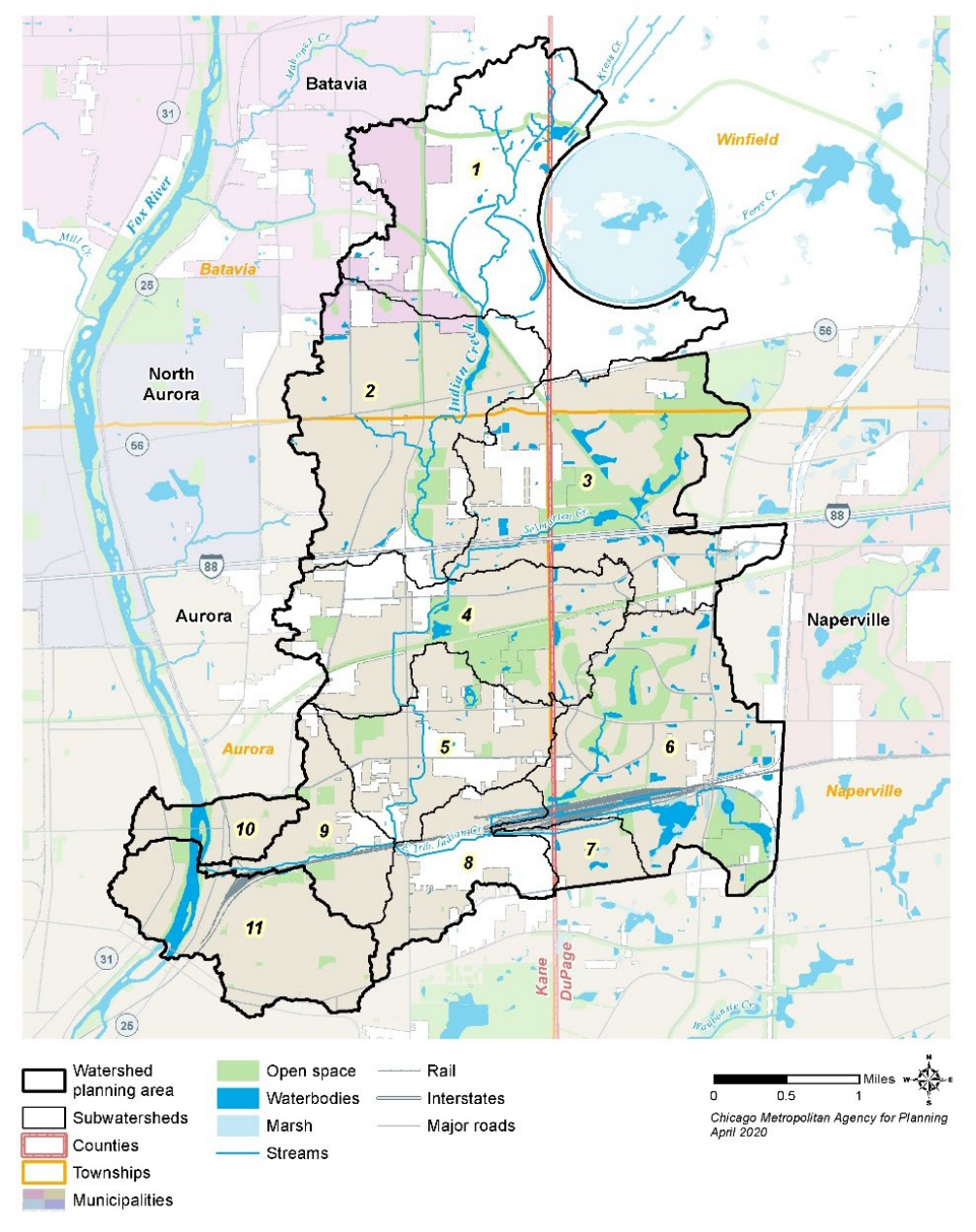
Handbook for Developing Watershed Plans to Restore and Protect our Waters (USEPA, 2005)
https://www.epa.gov/nps/handbook-developing-watershed-plans-restore-and-protect-our-waters

A Quick Guide to Developing Watershed Plans to Restore and Protect our Waters (USEPA, 2013)
https://www.epa.gov/sites/production/files/2015-12/documents/watershed_mgmnt_quick_guide.pdf

Watershed Academy
https://www.epa.gov/watershedacademy

Indian Creek Watershed Planning Area





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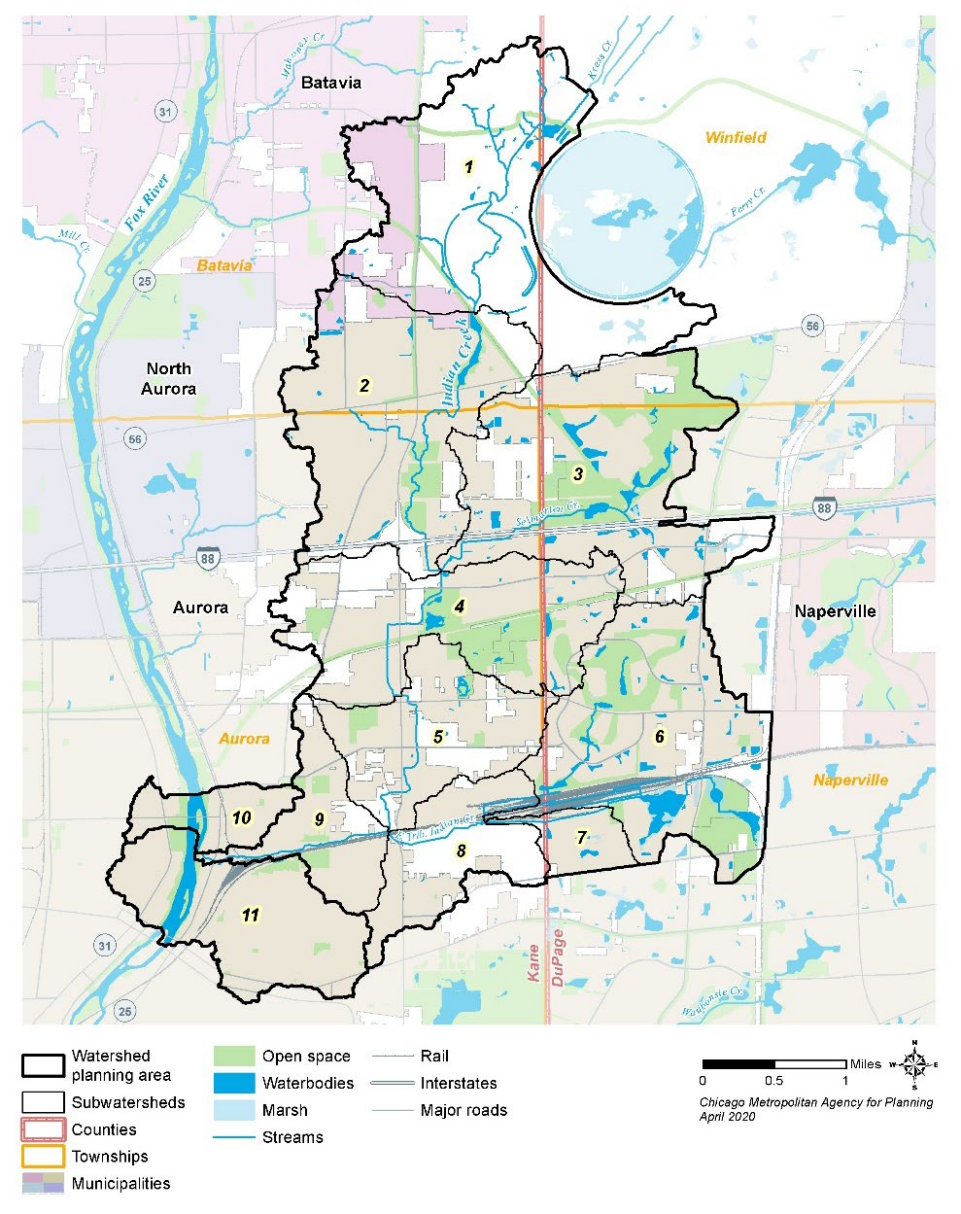
Indian Creek Planning Area

- HUC 12 watershed + direct drainage subsheds to Fox:
  14.4 + 1.7 = 16.1 sq mi
- Indian Crk + 2 tribs + Fox:
  ~8.5 + 5.3 + 1.2 = 14.9 mi
- Population ~ 58,000
- Water supply: Grndwtr, Fox R
- Numerous Jurisdictions
  - 2 counties, 2 munis, 4 twps.
    - 1 fed'l facility
  - 2 FPDs; 3 Pk Dists (+ Pk Dept)
  - 1 sanitary district
  - 1 SWCD
  - 2 library districts
  - 5, K-12 school dists, 20 schools
  - HOAs / POAs
  - …



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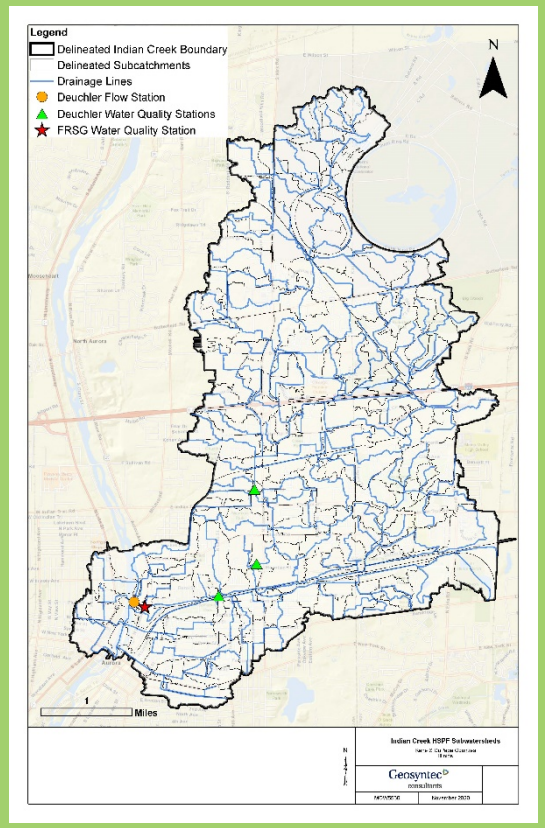
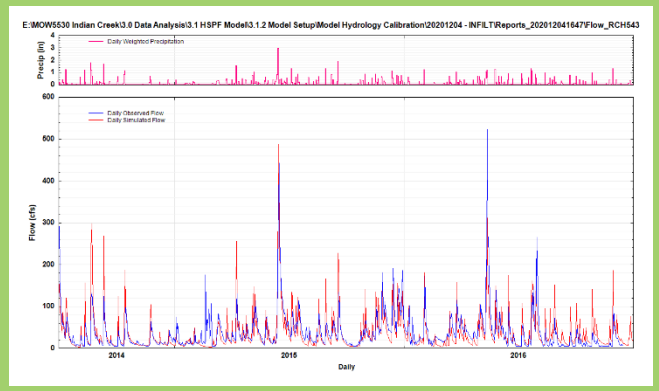
Indian Creek Watershed-based Planning Partners

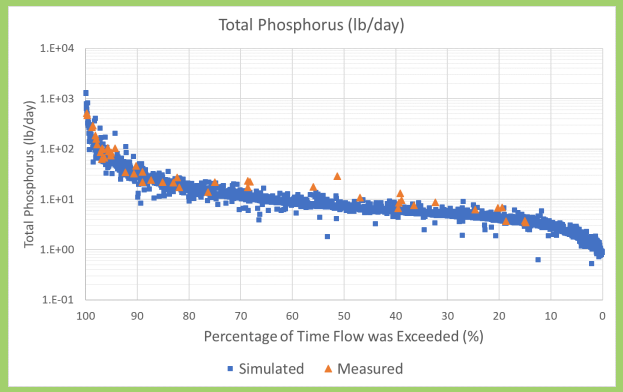
- **Illinois EPA -** Financial Assistance Agreement #604192: grant admin., plan review & approval
- **CMAP**: project management & admin., facilitating stakeholder participation, field data collection, site visits, preparing plan
- **Advisory Team: Kane & DuPage Co, Aurora, Fermilab, FMWRD, Deuchler** : visioning, insights, data/info sharing, collaboration & assistance w/ meetings and plan preparation elements/review, plan endorsement, implementation
- **Fox River Ecosystem Partnership:** public info & outreach services (webpage, *Downstream* e-newsletter, field trips)
- **Fox River Study Group:** data/info sharing, modeling support
- **Steering Committee**: representing local munis, districts, orgs; data/info/knowledge sharing; links to greater community - help w/ community outreach & education, vision, recommendations & decisions influencing the process & outcomes, plan endorsement, implementation

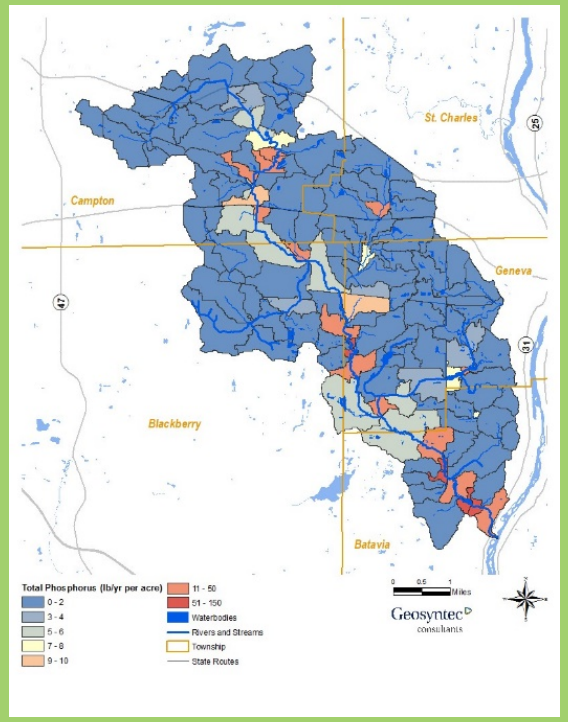
Indian Creek Watershed-based Planning Partners *cont.*

- **Geosyntec Consultants –** current & future land use–based pollutant load modeling; BMP pollutant load reduction modeling & cost estimates (HSPF model)









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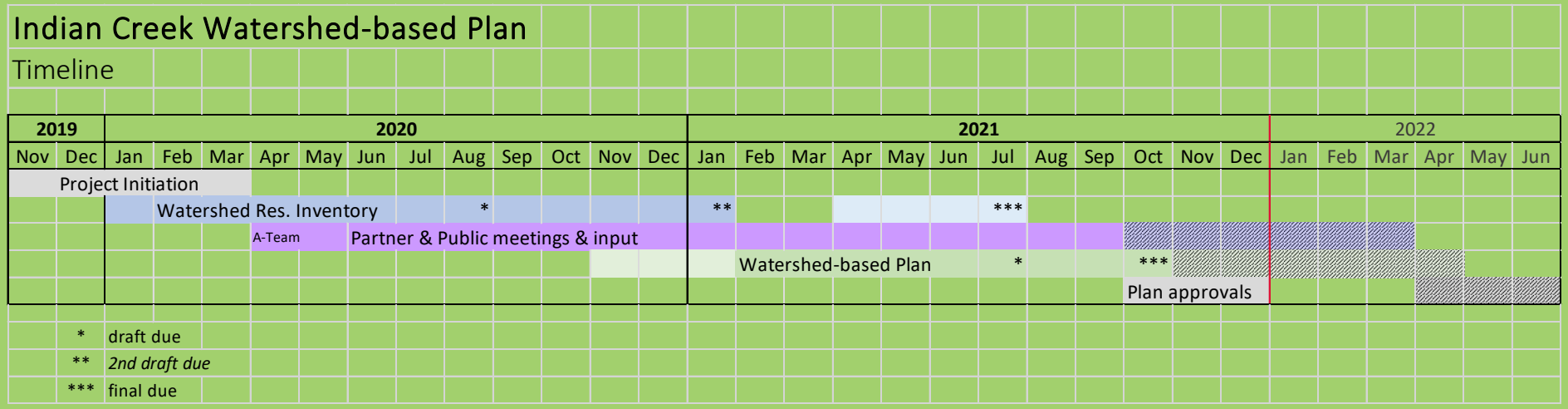
Watershed-based Plan Timeline



To Date:

- Advisory Team (A-Team) mtgs
- Project webpage on FREP website

  https://foxriverecosystem.org/fox/indian-creek
- Watershed Resource Inventory
  - 1st draft - Aug. 31, 2020
  - 2nd draft - Jan. 31, 2021

To Do:

- WRI field data collection: streams, det. basins → final WRI - *summer 2021*
- Plan development: incl. BMP ID & pollutant load reduction ests, P/P & I/E recs, *and*
  - Public engagement
- Final plan - late 2021 … *early 2022?*

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Public Engagement - Stakeholder Categories

Technical Experts

Specific knowledge & skills, Data, Advisors, Decision makers

- *A-Team* ✓

Interested Folks

Want to contribute, Specific knowledge, Local connections, possible Decision makers (*esp. implementation*)

- *SC ?*
- *Key Interviewees*

General Public

"Population uninterested or unaware of environmental implications of their everyday actions."

- *Engagement pathways – ideas, recs?*

* slide modified from presentation by Mary Mitros, DuPage Co.

Visioning + Issues, Opps, Outreach

- *Handout [to A-Team]:*

1) Vision for Indian Creek Watshd ~10 years from now
2) Strengths of the Indian Creek Watshd
3) Key issues of concern
4) Specific projects or actions to address your concerns or issues
5) Names of key persons or groups from which we should gain input
6) Means of communication for reaching, informing, gaining input from public

- *A-Team input rec'd Apr 2020*

Indian Creek Watershed-based Planning Partners *cont.*

Steering Committee – *thinking about invitees …*

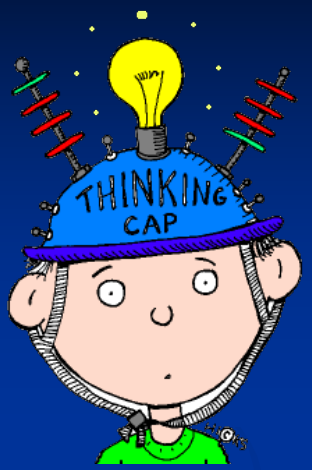
- Kane Co: Ivy Klee – Clean Water for Kane
- DuPage Co: Mary Mitros – Stormwater Communications
- Forest Preserve Districts: Kane Co, DuPage Co
- Aurora Twp: Road Comsnr
- City of Aurora: Tracey Vacek – Planning & Zoning
- City of Batavia: Planning, Engineering
- Park Districts: Fox Valley, Batavia
- Kane-DuPage SWCD
- Illinois Tollway: Kelsey Musich
- The Conservation Fndtn, Friends of Fox River, Sierra Club

- *Others?* *-- OR Key interviewees ?*

Watershed Stakeholders – *a diversity of people and groups*

- Homeowners, HOAs, Neighborhood groups
- Business & industry reps
- Farm owners, operators
- Schools, Colleges, Universities
- Community service orgs
- Religious orgs
- Libraries
- Land trusts
- Native American tribes
- Environ/Conserv groups
- Vol monitors/stewards
- Recreation-based clubs: fishing, hunting, hiking, sailing, canoeing, rowing …
- Municipal, Twp, County, State, Fed gov't
- Regional planning cmsn.
- Park / Forest Preserve Districts
- Soil & Water Cons. Dists.
- Irrigation Dists.
- …

Engaging Stakeholders…



Virtual* Communication & Engagement Pathways: *your experiences, ideas, suggestions…?

Questions and Comments

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