



King County



# Updates to the *Illicit Connection and Illicit Discharge (IC-ID) Field Screening and Source Tracing Guidance Manual*



Stormwater Work Group for Puget Sound, June 3, 2020

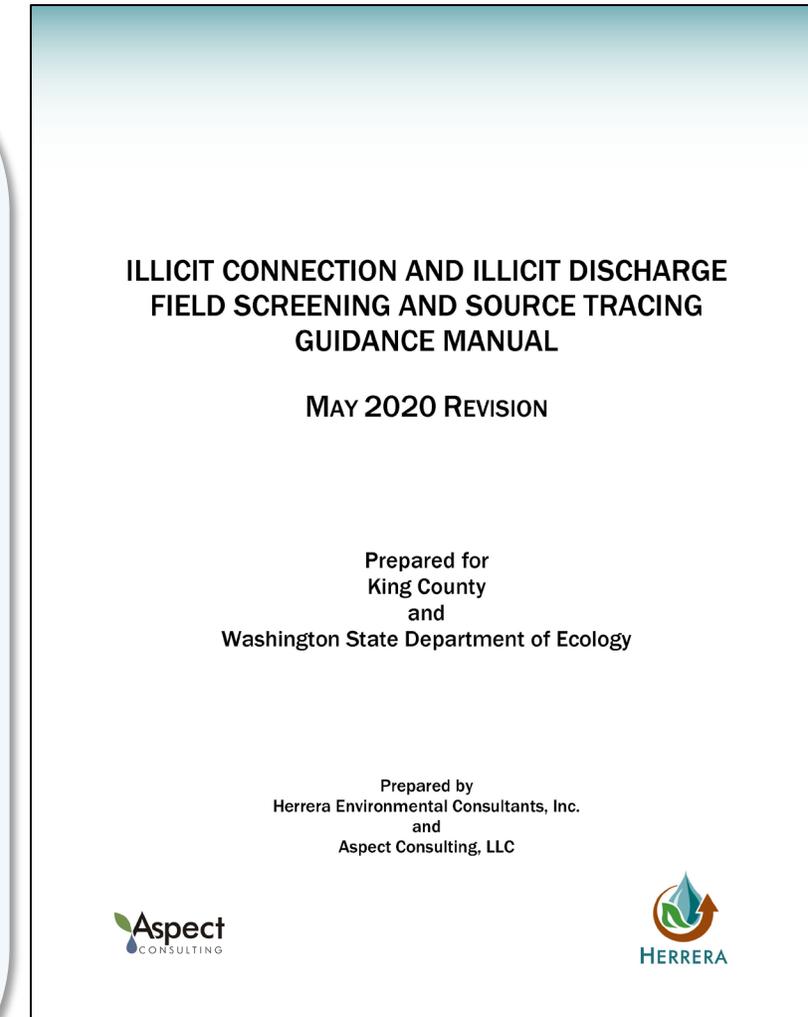
Funding provided by western Washington municipal stormwater permittees



# Introduction and Background

## What is the IC-ID Manual?

- Guidance document, originally published in 2013
- Widely used resource by municipal stormwater permittee staff for IC-ID field methods.
- Helps permittees meet permit requirements for illicit discharge detection and elimination (IDDE) programs
- Supports SAM program and regional adaptive stormwater management
- Terminology: IC-ID vs. IDDE



[2020 IC-ID Manual link](#)

## Input For Updates to Manual



## Focus on Field Methods

- ✓ **Field Screening Methodologies (FSMs), 4 Primary + 9 Other**
- ✓ **Indicators, 7 Primary + 8 Follow-up + 22 Other**
- ✓ **Source Tracing Methodologies (STMs), 8 Primary + 4 Other**
  
- X Does not cover elimination of ICs or IDs, enforcement, or corrective actions**

# Field Screening Methodologies (FSM)

## Reorganized Information

- Fewer **Primary** and more **Other** methodologies
- **Business Inspections** moved to STM list
- **Stormwater BMP Inspections** moved to **Other** FSM list
- More **Others** for wider range of screening needs: **Canine Scent Tracking, Stream Walks, Infrared Photography**

## Numerous edits and updates with more detail and clarity

- **Inspections: Catch Basin/Manholes, Ditches, and Outfalls, and by Video**
- Wet and/or dry screening application, *updated* Pros/Cons tables
- Streamlined presentation, reduced redundancy

## Primary

- **Total Petroleum Hydrocarbons (TPH)** moved from **Others**
- **Bacteria:** expanded to four bacteria types  
**Fecal coliform, *E. coli*, Bacteroides, Enterococci**
- Pollutant Sources tables: expanded for most Indicators
- **Potassium** moved to **Others**

## Others

- **Chemical Oxygen Demand, Salinity, Fluorescence, Oxygen Stable Isotopes**
- **Caffeine**, and combinations to detect sanitary waste:  
**Specific Conductivity, Pharmaceuticals, Temperature**

# Source Tracing Methodologies (STM)

## Primary

- **Sandbagging, Optical Brighteners:** moved to **Others** list and appendix
- **Vehicle/Foot Reconnaissance:** expanded description

## Others

- New: **Pressure Testing** of Pipes (for drinking water or irrigation pipe leakage)

## Detail

- **Sand Bagging, Dye Testing, Smoke Testing**
- **Continuous Monitoring:** expanded from temperature to more in-situ parameters
- Complementary STMs: match to suspected source (in-pipe vs ground surface)
- *Updated Pros/Cons tables*

# Overall Updates and Edits

## Regulatory Requirements

- *Updated* summary of permits requirements
- *Updated* definitions list to match permits

## Flow Charts and Document Organization

- *Updated* and expanded flow charts
- Document navigation: section names in headers, subsection numbers

## Appendices and References

- *Updated* equipment costs and lists and literature references
- New: field sheet templates for several methodologies
- New: Index of suspected sources of discharge with links to pages

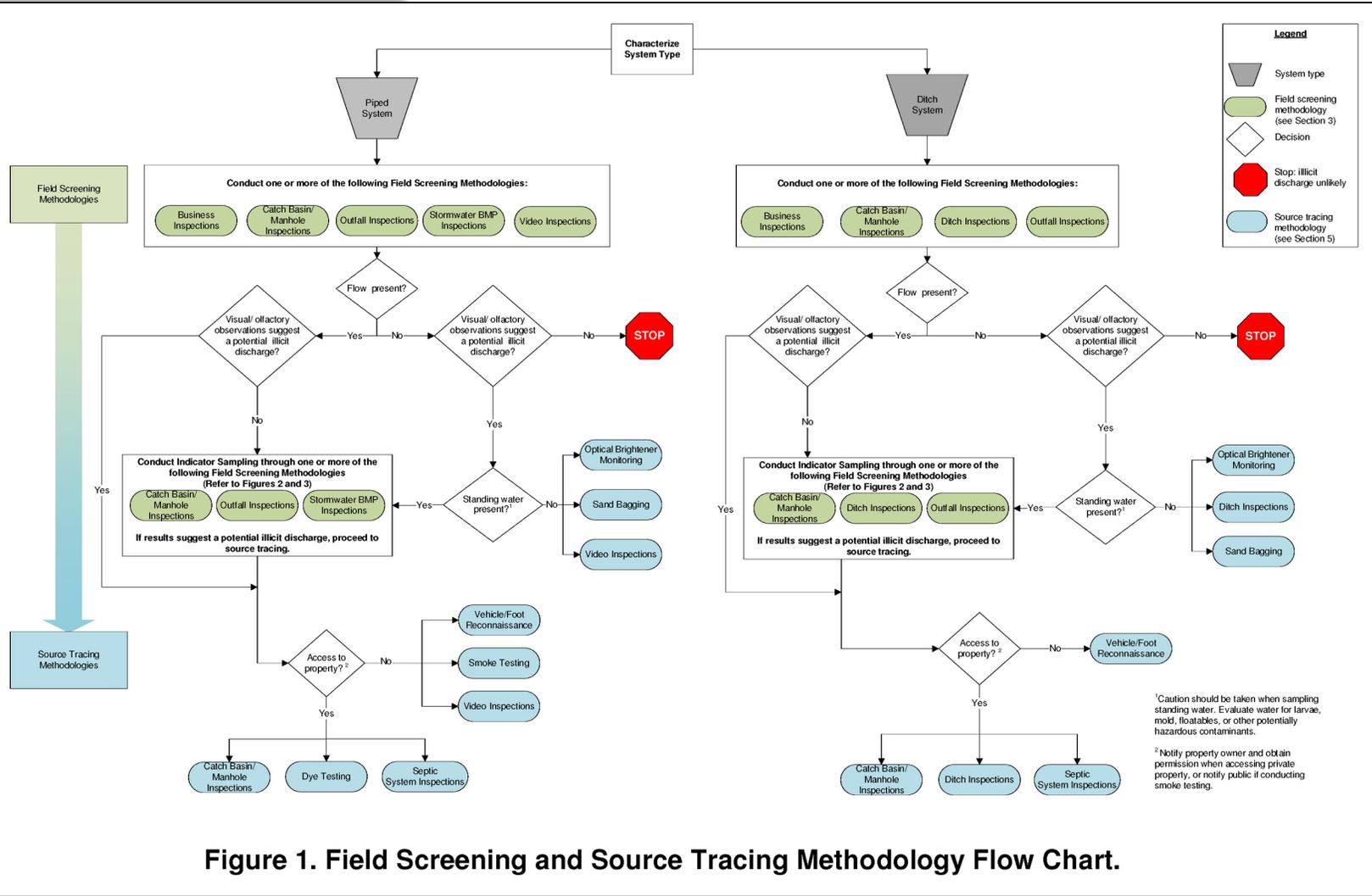


Figure 1. Field Screening and Source Tracing Methodology Flow Chart.

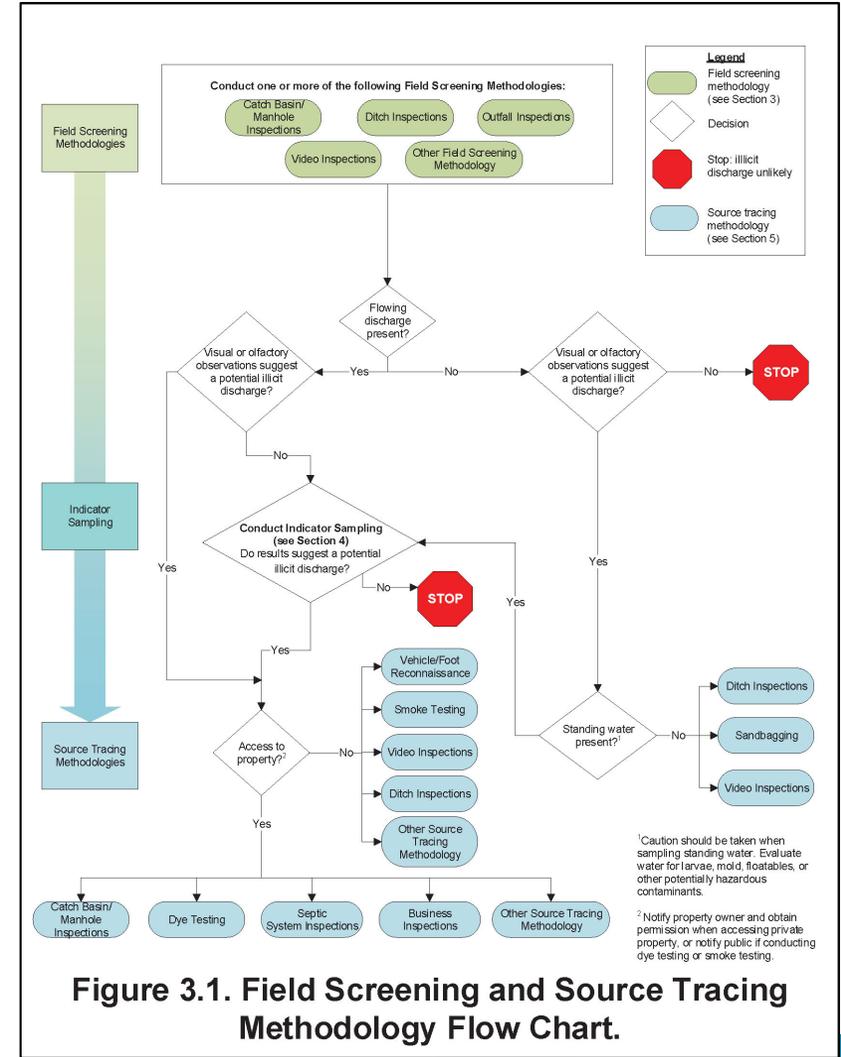


Figure 3.1. Field Screening and Source Tracing Methodology Flow Chart.

# Next Steps: Publish Manual, Training Workshops, Videos

## Publish and Announce Manual

- Websites: Ecology SAM and WA Stormwater Center
- Flyer announcing published manual
  - 12 regional organizations and permit forums
- Presentations to municipal groups: NPDES Coordinators, APWA Stormwater
- Conferences - TBD

## Eight Trainings

- *In-person trainings, hands-on, demo stations, throughout western WA*
- *Originally April-July 2020*
- *Rescheduled to June-September*
- *Reschedule again?*

## Five Videos

- New videos of training workshop and specific methods
- Add to [WSC YouTube Channel](#)
  - 14 existing videos

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2020 IC-ID Manual available via  
[Washington Stormwater Center](#) and [Ecology SAM Source ID Program](#)