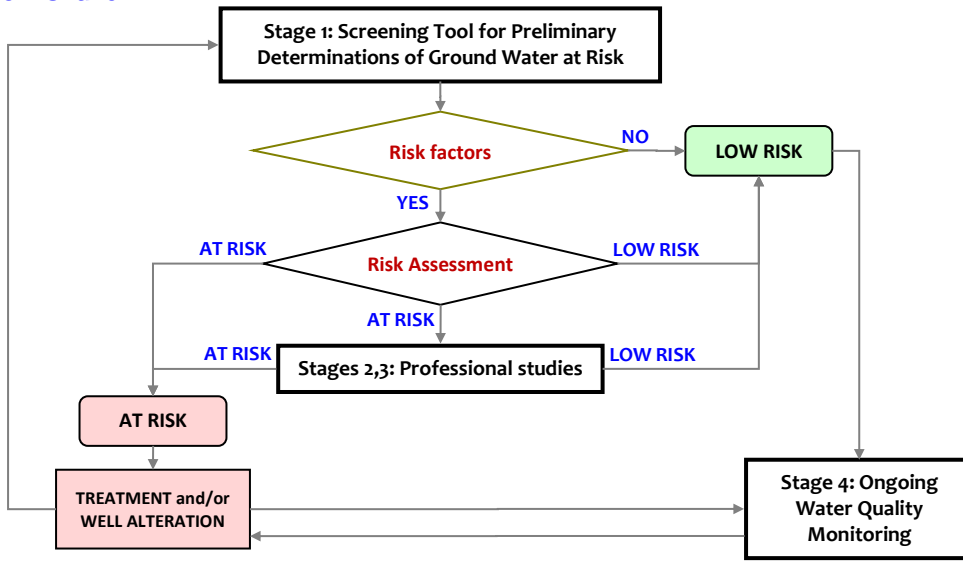


Flowchart:



WATER SYSTEM NAME: _____ **WELL NAME:** _____

BC MoE Well ID Plate Number: **BC MoE Aquifer:** / none / unknown

Well Log: Examined Attached N/A Sanitary Survey Conducted Verbal / Measured

Latitude: ° N , **Longitude:** ° W /

Well Depth: feet or metres below ground or unknown /

Water Level in Well: feet or metres below ground or unknown /

Well Casing Diameter: inches or mm or unknown /

Well Location Sketch

Sketch the well location and proximity to roads, buildings, waterways, sources of contamination, etc. Distances may be estimated in feet or metres or paced off.

or ... on separate page

STAGE 1: SCREENING TOOL CHECKLIST FOR GUDI/GARP

RISK FACTORS and CRITERIA	At Risk	Low Risk	Unknown	Comments
AQUIFER TYPE and SETTING				
Shallow well with intake depth < 15m below ground and in an unconfined aquifer, or any karst well [e.g. sand & gravel or bedrock from intake to surface]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PHE can review well log / mapped aquifers. Aquifer
WELL LOCATION				
* <i>Public Health Act, Health Hazards Regulation</i>				
Well situated inside setback distances of the HHR* or from a possible source of contamination <i>incl. septic</i> [contam: 30 m ; dwelling: 6 m ; dump: 120 m; septic system 300 m]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Separation from known Contaminant Sources Setbacks
Well located within 150m of high water mark or natural boundary of surface water feature [e.g. top of bank], <u>and</u> with intake < 15m below either: a) ground surface (i.e. "shallow" well) or b) normal water level (NWL)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Separation from Surface Water Bodies Refer to Figure below. 15m guideline may be <i>increased</i> (sand) or <i>decreased</i> (clay) depending on the surrounding soil type. GUDI
WELL CONSTRUCTION				
** <i>Ground Water Protection Regulation</i>				
... does not meet GWPR** (s7) re <i>surface sealing</i> . [5 m sealant underground along casing, no visible gaps at surface]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disregard if SW cannot reach the wellhead. Seal
... does not meet GWPR (s10) re <i>well cap/cover</i> . [secure cap/cover, prevent entry by people or animals, stop artesian flow]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"Secure" → not removable by hand Cap
... does not meet GWPR (s11) re <i>floodproofing</i> . [prevent contam entering, well pit/house must drain or have sump pump, grading to prevent ponding of water at wellhead]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Flood
... does not meet GWPR (s11) re <i>wellhead protection</i> . [protect from physical damage, stickup 0.3 m above ground/floor, no plastic casing at ground]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stickup
WATER QUALITY RESULTS				
Well shows recurring unsatisfactory bacti results. [any <u>confirmed</u> <i>E.coli</i> or e.g. ≥3 total coliforms in last 24 samples]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[usually requires >24 samples] Bacti
Water system has seasonal turbidity problems associated with the well. [e.g. ≥ 5 NTU *]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Turbidity
Water system has a confirmed history of disease outbreaks associated with surface water pathogens. [check paper file, HealthSpace, experienced staff]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[none in NH pre-2014] Outbreaks

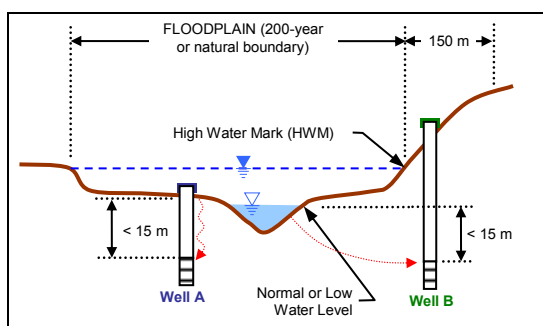


Figure: Well location with respect to surface water features (lake, pond, river, creek, spring, etc.)

- Well A:** within 150m of HWM; intake < 15m below ground
→ At Risk
- Well B:** within 150m of HWM; intake between HWM and normal water level (NWL) or < 15 m below NWL
→ At Risk

* If new well has high turbidity, mark "unknown" and recommend redevelopment & resampling.

Risk Assessment:

Did any risk factor suggest that the system is **At Risk** (as opposed to **Low Risk** or **Unknown**)?

- If **Yes** then consider disinfection or remediation (see remediation options below), or
 - proceed to Stage 2/3 Hydrogeological Investigation.
- If **Unknown** because information is unavailable for any factor(s) or criteria of the assessment, then *consider* moving to Stage 2/3 Hydrogeological Investigation.
- If **No**, move to Stage 4 Long-term Water Quality Monitoring.

Remediation Options:

- Disinfection to meet Health Authority surface water treatment objectives requirements (43210)
- Disinfection to meet Health Authority groundwater treatment objectives
- Disinfection to meet Health Authority "virus only" groundwater treatment objectives
- Provide alternate source of water
- Well alteration / correct deficiencies in well construction
- Relocate the well
- Eliminate source(s) of contamination
- Stage 2 Preliminary Hydrogeological Investigation
 - Specific concerns _____
- Stage 4 Long-term Water Quality Monitoring
- Other _____

Assessment Comments:

Completed by: _____

DATE: _____

Health Authority Review Comments:

Reviewed by: _____

DATE: _____

