# Current pathogen management

# Linking contact recreation and pathogens

- The risk of disease during contact recreation will increase as pathogens in the water increase

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# Sources of pathogens

- human waste
- livestock waste
- stormwater
- wild animals

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# Primary contact recreation

Full immersion

< *Ecoli* 540 cfu/100mL 95$^{th}$ percentile

Proposed Plan objective is met for significant contact recreation rivers and lakes:

- Ruamāhanga River
- Tauherenikau River
- Waingawa River
- Waiohine River
- Waipoua River
- Lake Wairarapa

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# Secondary contact recreation

Partial immersion

< *Ecoli* 1000 cfu/100mL median

NPS-FM and proposed Plan bottom lines are met but close to exceeding in:

- Huangaroa River
- Kopuaranga River
- Mangatarere Stream
- Parkvale Stream
- Taueru River
- Whangaehu River

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# Comment

- The indicator bacteria *Ecoli* is removed in wastewater treatment but other pathogens may still be discharged

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# Regulation

- point source discharges generally require resource consent
- There are specific rules for livestock access
- diffuse source discharges are generally permitted

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# Non-regulatory approaches

- Method 27 gives priority to improving water quality in rivers that do not meet contact recreation objectives
- Good practice for other diffuse source contaminants will benefit pathogen discharges (eg. Method 12, Method 28)

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