


Parapara catchment monitoring 2009-2010

Presentation to the Doubtless Bay
Working Group
March 2014



Receiving environment monitoring 2009-2010

- Weekly monitoring between April 2009 to March 2010
- 9 sites: 4 upstream; 5 downstream
- Water quality tested for:
 - Indicator bacteria;
 - Ammonia;
 - Dissolved oxygen;
 - Biological oxygen demand.

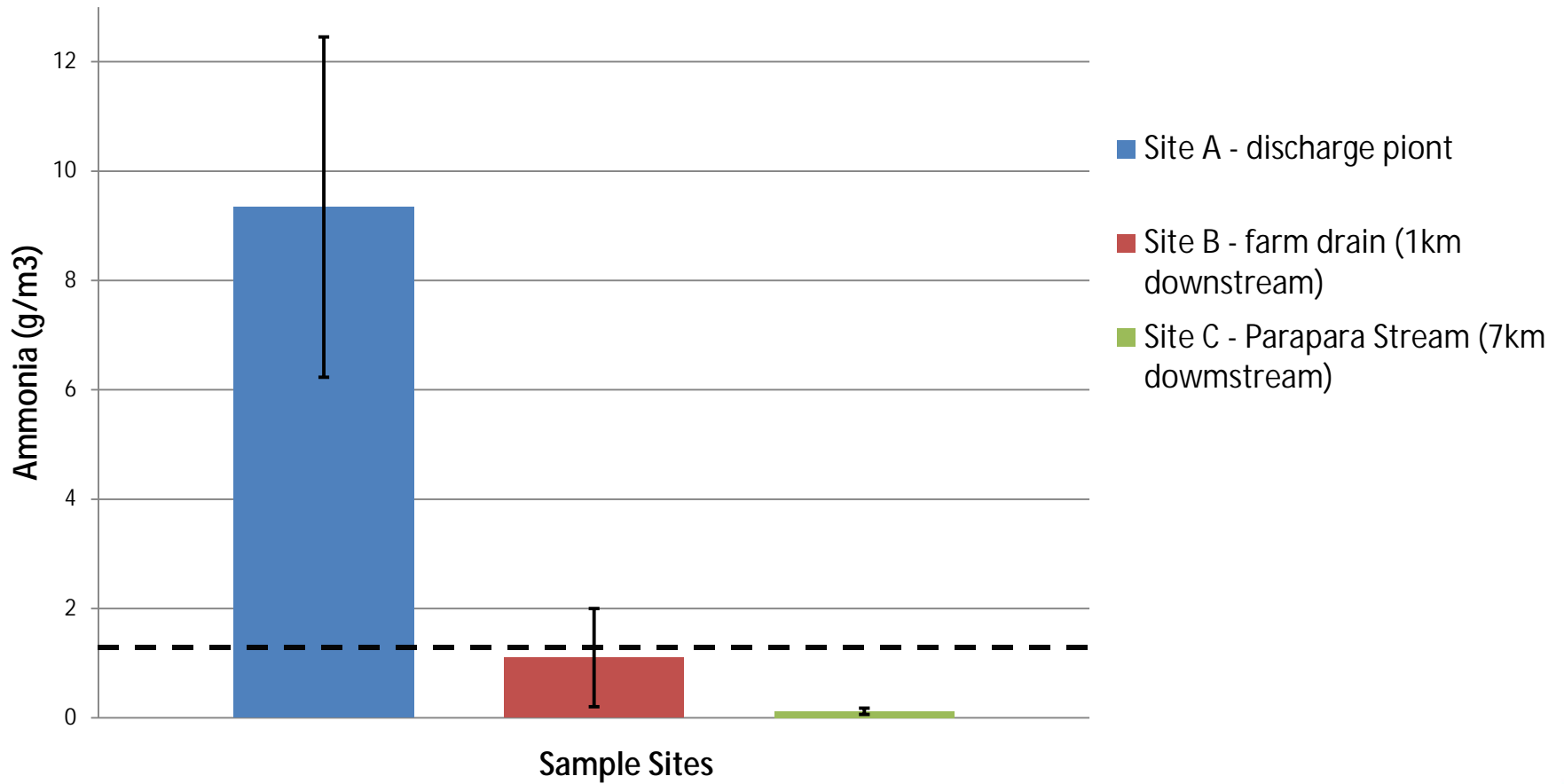
Sample sites



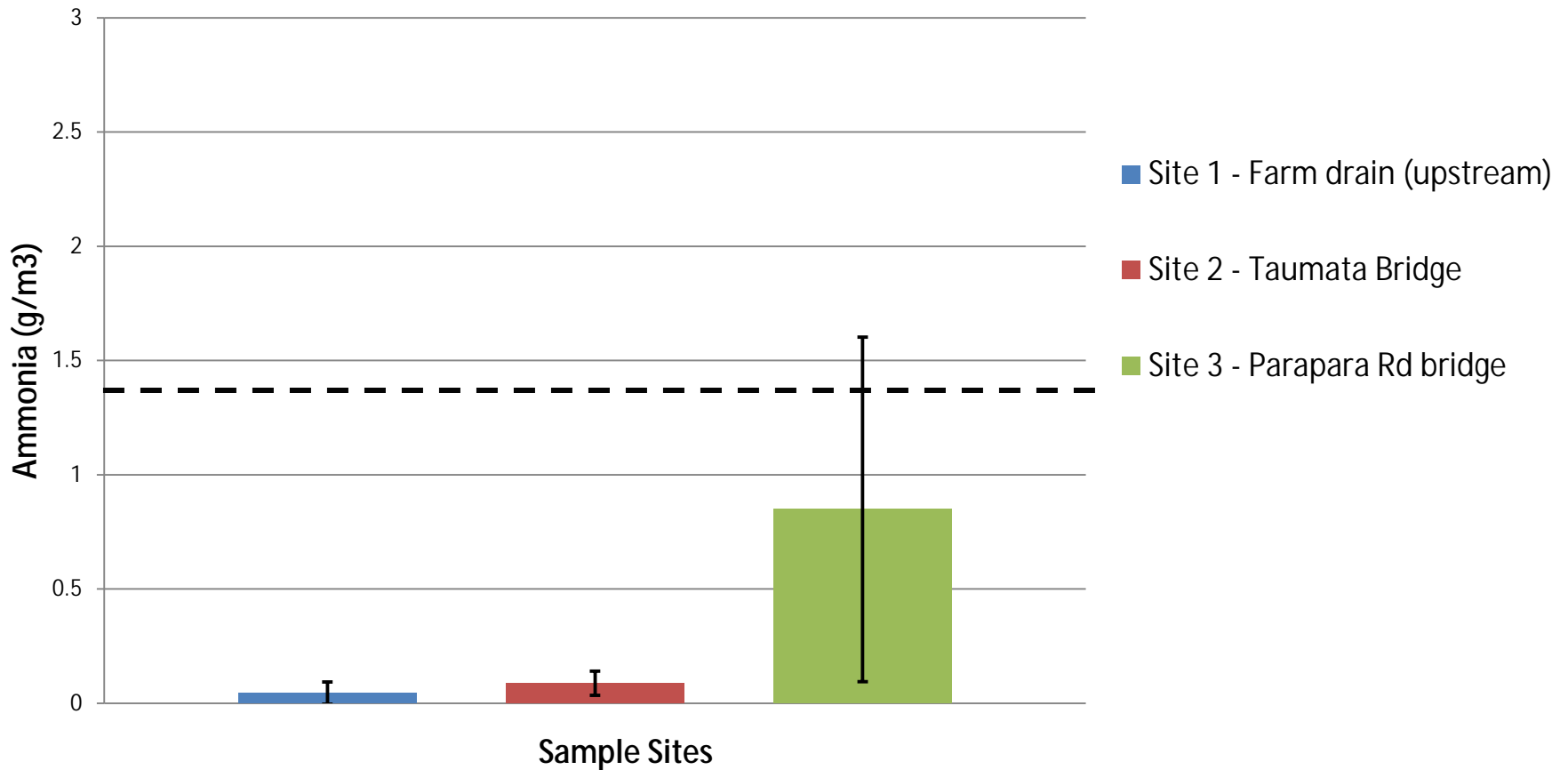
Results

- Results presented today:
 - 3 upstream and 3 downstream sites
 - Average ammonia, DO and *E.coli*
 - Error bars represented confidence intervals at 99% (or 90% the case of *E.coli*); that is, the level of confidence that the average will be within a certain range.
 - Dashed line represents proposed national bottom line.

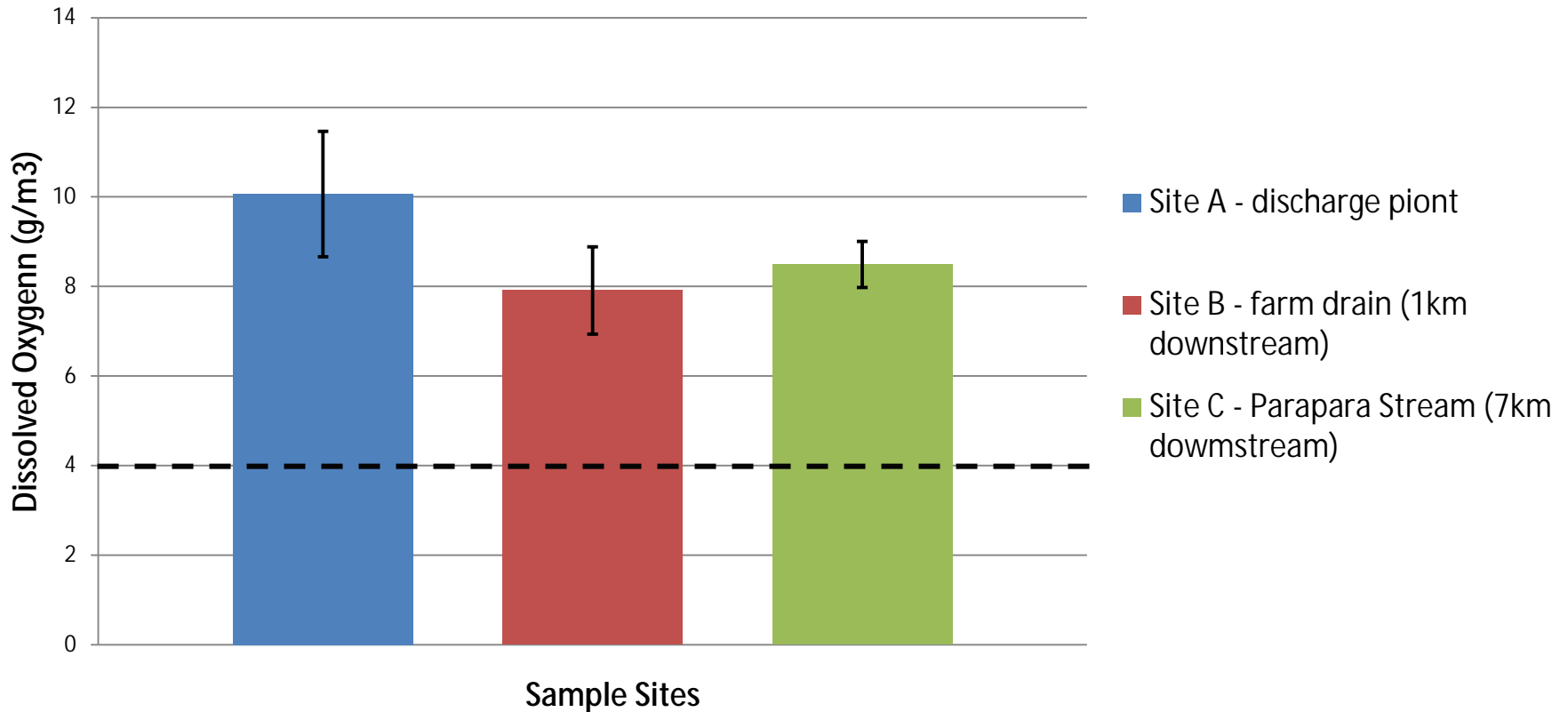
Average Ammonia (downstream sites)



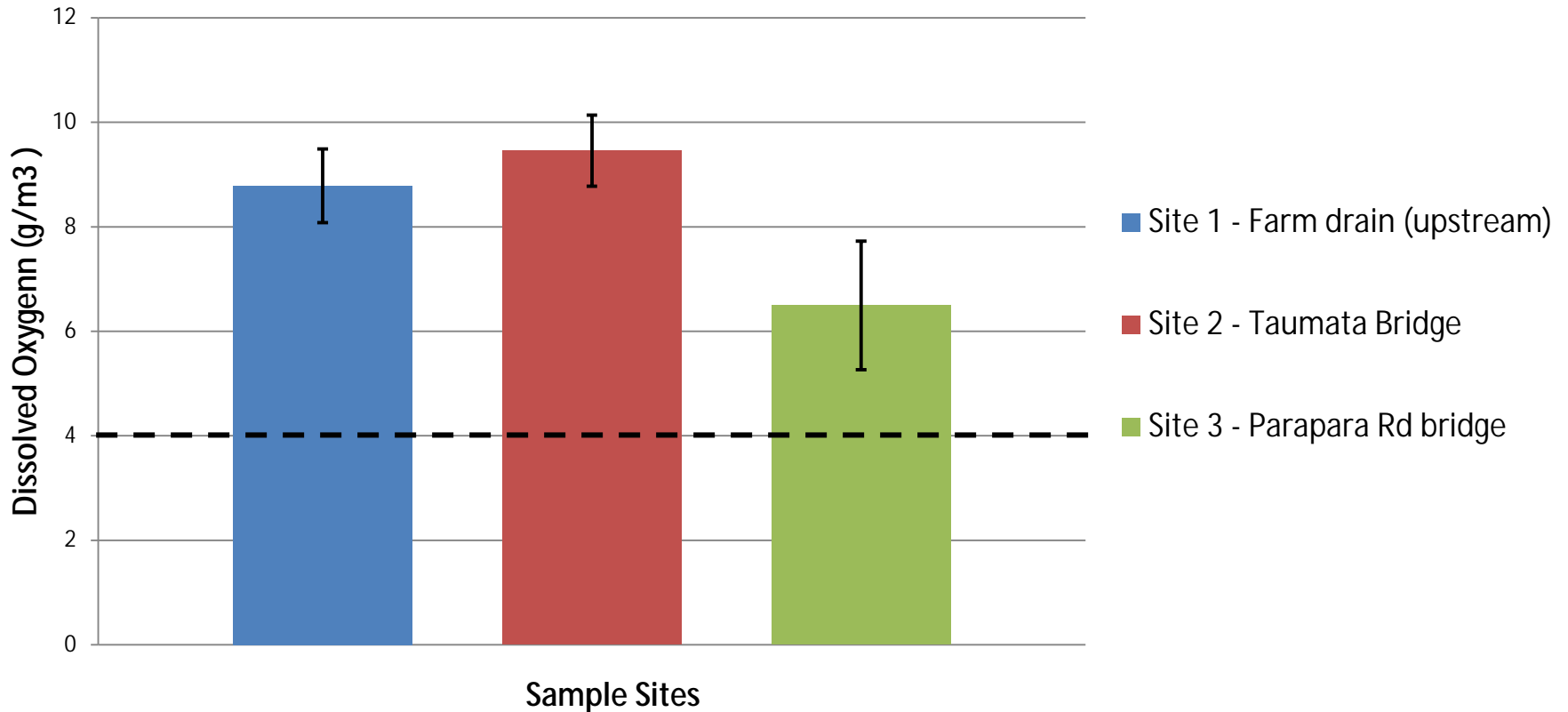
Average Ammonia (upstream sites)



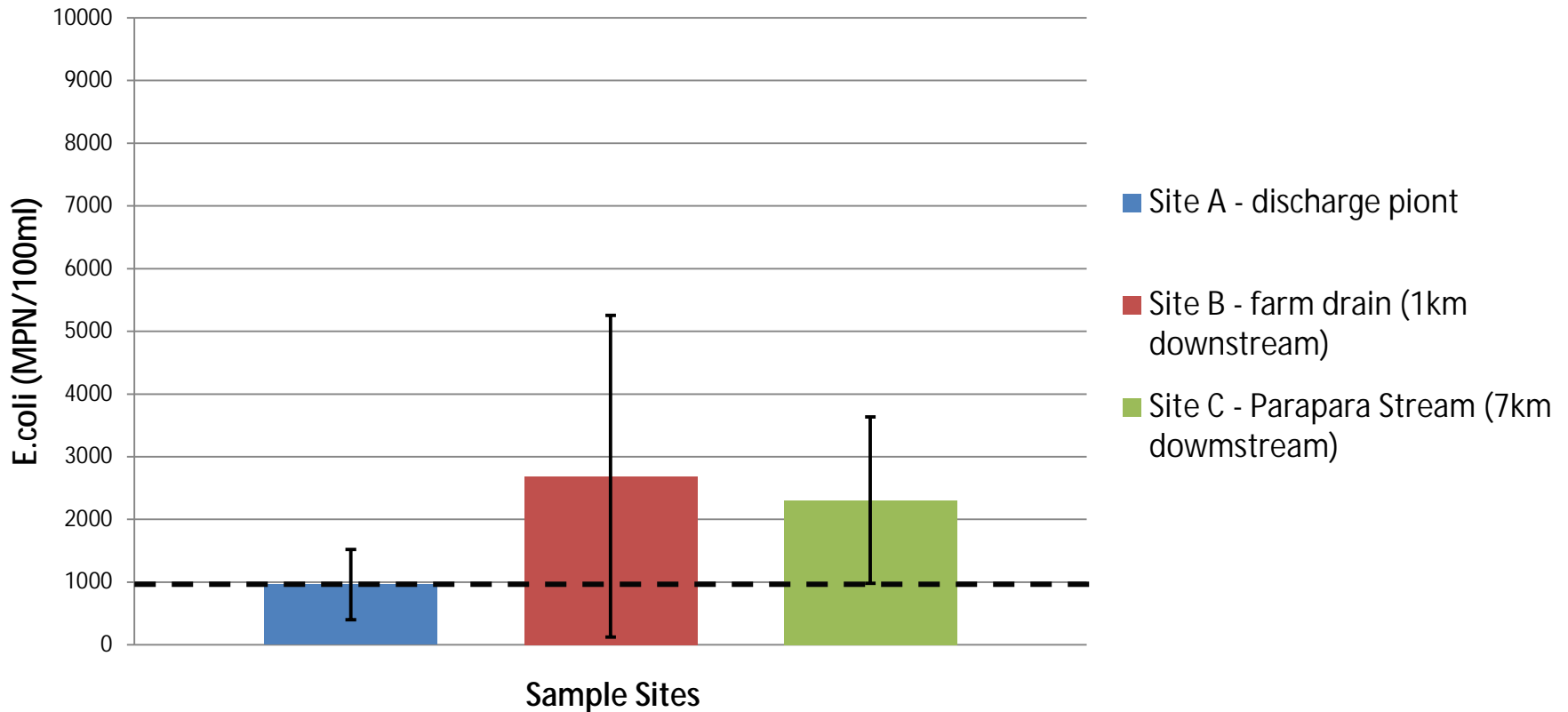
Average DO (downstream sites)



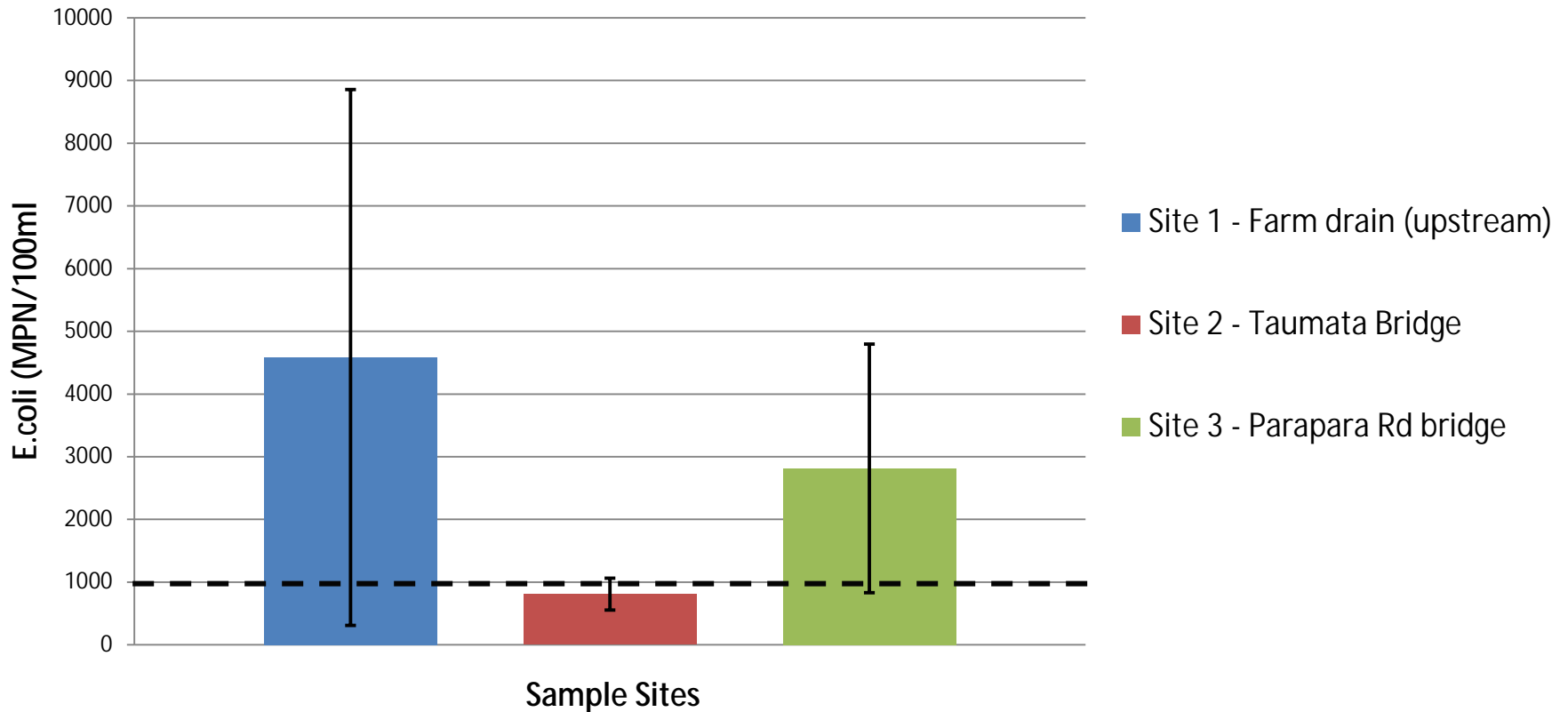
Average DO (upstream Sites)



Average E.coli (downstream sites)



Average E.coli (upstream sites)



Summary

- Ammonia at discharge much higher than proposed bottom line.
- Ammonia 1km downstream is much lower than discharge but can at times exceed bottom line; linked with dilution.
- Dissolved oxygen is not an issue
- Indicator bacteria results suggest surrounding land use is a major source of faecal contamination.