# King tides -- a glimpse of future sea level rise

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A combination of storms and high tides caused significant beach erosion on the Gold Coast last summer. Photo (c) Bruce Miller

(PhysOrg.com) -- Tomorrow, beach-goers will get a glimpse of what our coastlines may look like in 50 years, when New South Wales and South East Queensland experience the highest daytime 'king tides' forecast for 2009.

"By 2060 to 2070 we could be experiencing tides of at least this magnitude every month, rather than just twice a year due to climate-change induced sea level rise," says a research scientist with CSIRO's Climate Adaptation National Research Flagship, Dr Kathy McInnes.

King tides are natural events that happen twice a year. The tides predicted for many parts of the east coast between 8am and 10.30am on Monday morning are around 40 to 50 cm higher than the average 'spring tide' (the highest tide in the monthly moon cycle).

Dr McInnes says observing the king tide can assist communities to plan and prepare for the effects of climate change.

"This king tide is not caused by climate change, but it can help us picture what our coastlines might look like in the future."

According to the Intergovernmental Panel on Climate Change, sea levels are projected to rise by between 18-79cm or more this century.

"Photographing or recording the effect of the king tide on seawalls, jetties, coastal infrastructure and foreshore areas creates a helpful visual record for use in adaptation planning," Dr McInnes says.

"In New South Wales the State Government, local councils and community groups are coordinating a state-wide photographic survey of the king tide for this purpose.

"The actual height reached by the king tide will depend on local weather and ocean conditions on the day."

Scientists from the CSIRO Climate Adaptation Flagship are working with communities, governments and industry to understand and prepare for the impacts of climate change.

Provided by CSIRO