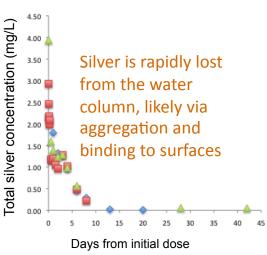
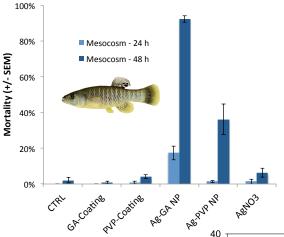
## Preliminary Mesocosm Results

Treatment		# Replicates
Control (True Control)	+0.32 mg N L <sup>-1</sup> as KNO <sub>3</sub>	4
Gum Arabic Coated AgNPs	$[Ag] = 2.5 \text{mg L}^{-1}$ , $+0.32 \text{ mg N L}^{-1}$ as $KNO_3$	3
PVP Coated AgNPs	[Ag] = $2.5 \text{mg L}^{-1}$ , $+0.32 \text{ mg N L}^{-1}$ as KNO <sub>3</sub> [Ag] = $2.5 \text{mg L}^{-1}$ , $+0.32 \text{ mg N L}^{-1}$ as KNO <sub>3</sub>	3
AgNO <sub>3</sub> (positive control)	$[Ag] = 2.5 \text{mg L}^{-1}$	3
Gum Arabic (coating control)	$GA + 0.32 \text{ mg N L}^{-1} \text{ as KNO}_3$	3
PVP (coating control)	PVP +0.32 mg N $L^{-1}$ as KNO <sub>3</sub>	3

AgNPs are more toxic to killifish larvae on an equal Ag mass basis than AgNO<sub>3</sub>







There were rapid responses in dissolved organic carbon, likely from plant release, and in microbial activity, following treatment with Ag

