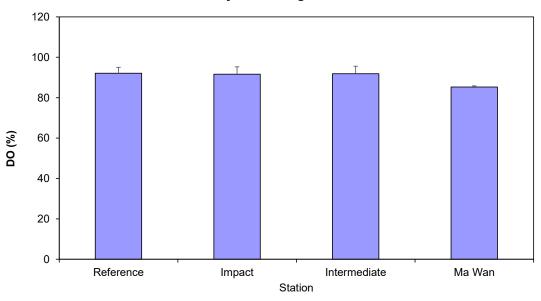


#### Routine Water Quality Monitoring for ESC CMP V - December 2023

Figure 1: Level of pH recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023

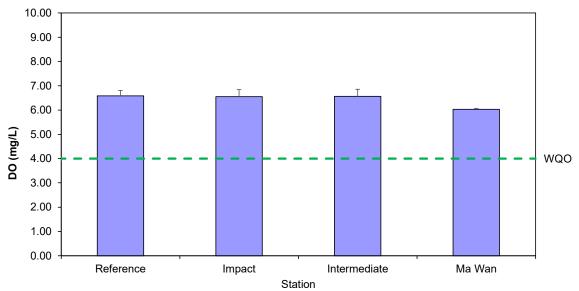


Routine Water Quality Monitoring for ESC CMP V - December 2023

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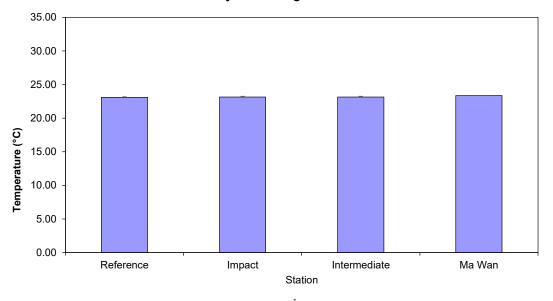
Figure 2: Level of Dissolved Oxygen (DO) (% saturation; mean + SD)<sup>1</sup> recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023

The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.



Routine Water Quality Monitoring for ESC CMP V - December 2023

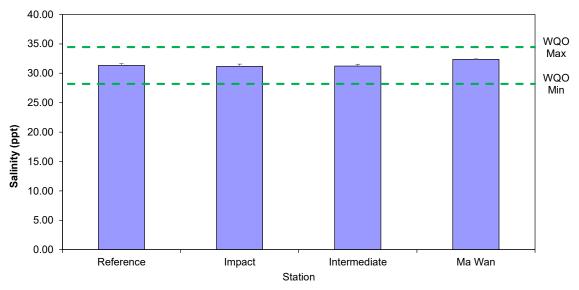
Figure 3: Concentration of Dissolved Oxygen (DO) (mg/L; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023



Routine Water Quality Monitoring for ESC CMP V - December 2023

 
 Figure 4:
 Level of Temperature (°C; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023

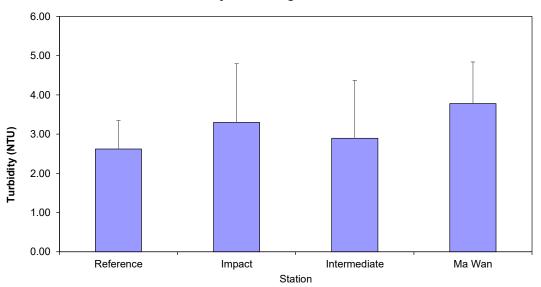
<sup>&</sup>lt;sup>1</sup> The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.



Routine Water Quality Monitoring for ESC CMP V - December 2023

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Figure 5: Level of Salinity (ppt; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023

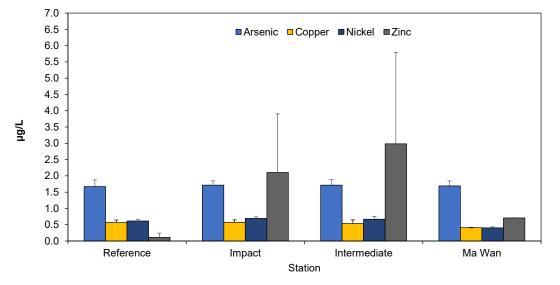


Routine Water Quality Monitoring for ESC CMP V - December 2023

Level of Turbidity (NTU; mean + SD) recorded during Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023 Figure 6:

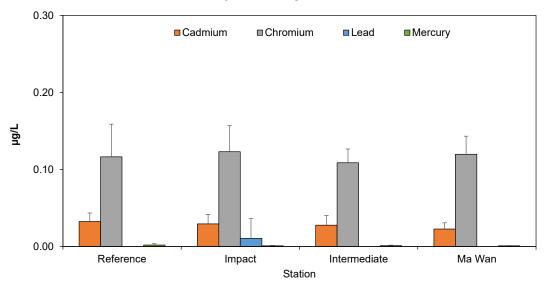
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The mean and standard deviation (SD) for in-situ data are the mean and SD for water columns within the area.



## Routine Water Quality Monitoring for ESC CMP V December 2023

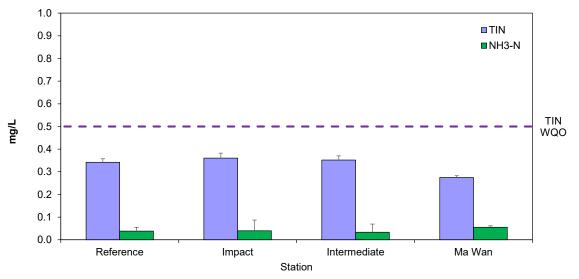
Figure 7: Concentration of Arsenic, Copper, Nickel, and Zinc (µg/L; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023



#### Routine Water Quality Monitoring for ESC CMP V December 2023

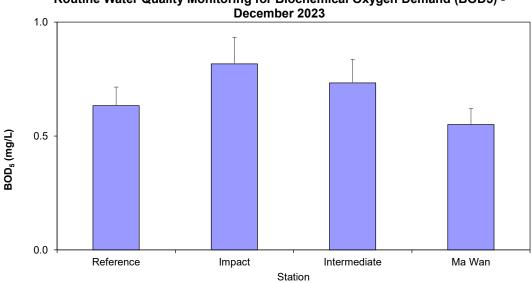
**Figure 8:** Concentration of Cadmium, Chromium, Lead, Mercury and Silver, (µg/L; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023

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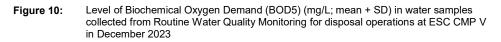


## **Routine Water Quality Monitoring for Nutrients - December 2023**

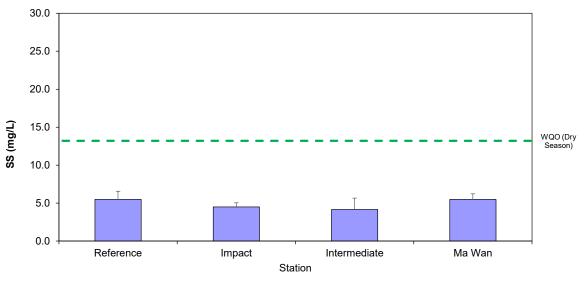
Concentration of Total Inorganic Nitrogen (TIN) and Ammonia Nitrogen (NH3-N) (mg/L; mean + SD) in water samples collected from Routine Water Quality Monitoring for disposal operations at ESC CMP V in December 2023 Figure 9:



Routine Water Quality Monitoring for Biochemical Oxygen Demand (BOD5) -

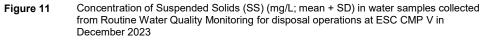


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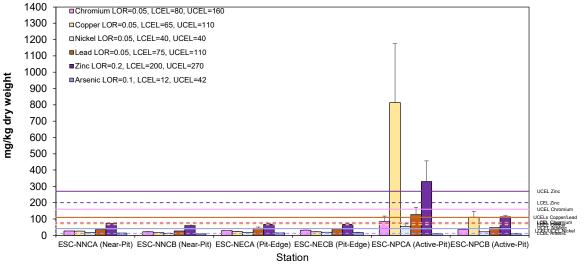


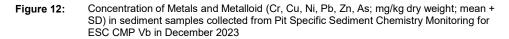
## **Routine Water Quality Monitoring for Suspended Solids - December 2023**

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#### Pit Specific Sediment Chemistry for Metal and Metalloid Contaminants at ESC CMP Vb - December 2023





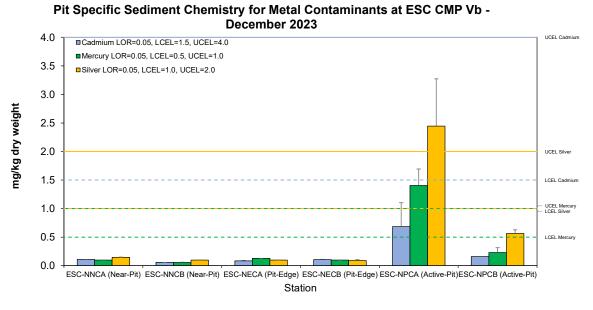
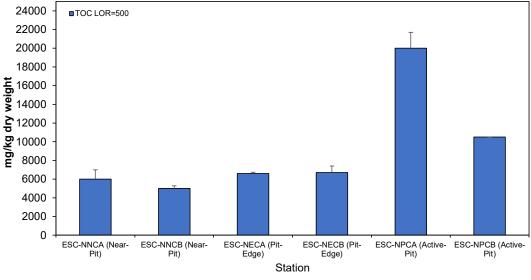


Figure 13: Concentration of Metals (Cd, Hg, Ag; mg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in December 2023



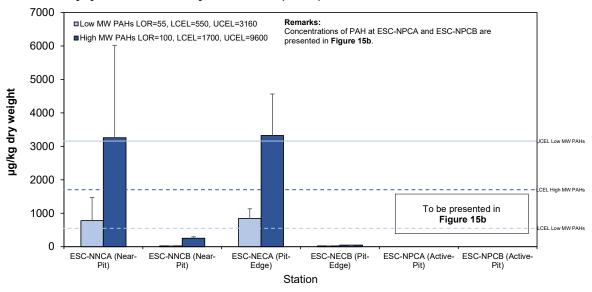
#### Pit Specific Sediment Chemistry for Total Organic Carbon (TOC) at ESC CMP Vb - December 2023

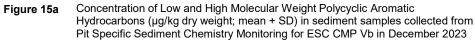
Figure 14: Concentration of Total Organic Carbon (TOC) (mg/kg dry weight; mean + SD) in sediment samples collected from Pit Specific Sediment Chemistry Monitoring for ESC CMP Vb in December 2023

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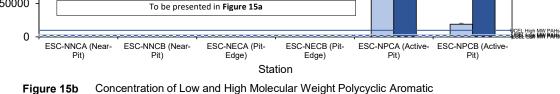


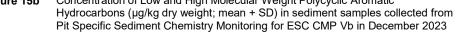
#### Pit Specific Sediment Chemistry for Low and High Molecular Weight Polycyclic Aromatics Hydrocarbons (PAHs) at ESC CMP Vb - December 2023



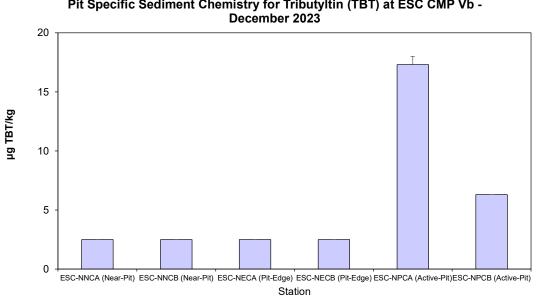


# Pit Specific Sediment Chemistry for Low and High Molecular Weight Polycyclic Aromatics Hydrocarbons (PAHs) at ESC CMP Vb - December 2023

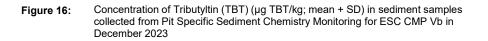




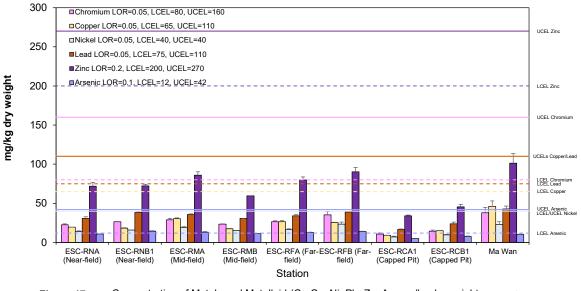
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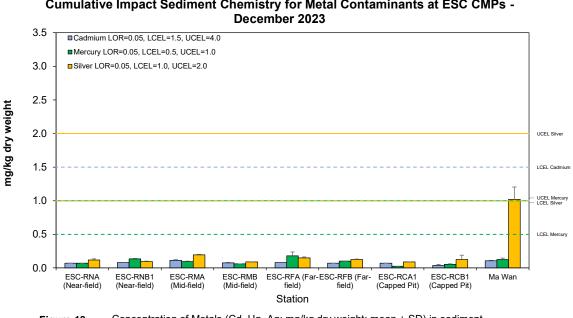
# Pit Specific Sediment Chemistry for Tributyltin (TBT) at ESC CMP Vb -



#### **Cumulative Impact Sediment Chemistry for Metal and Metalloid Contaminants** at ESC CMPs - December 2023

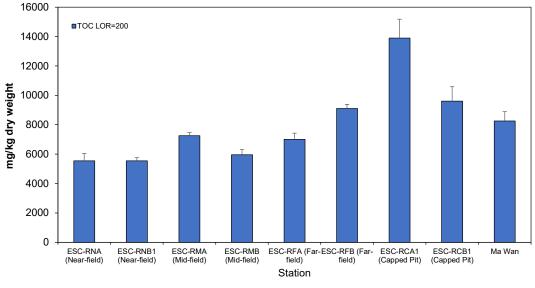


Concentration of Metals and Metalloid (Cr, Cu, Ni, Pb, Zn, As; mg/kg dry weight; mean + Figure 17: SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in December 2023



Cumulative Impact Sediment Chemistry for Metal Contaminants at ESC CMPs -

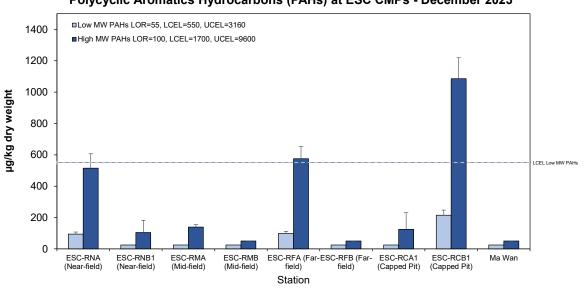
Concentration of Metals (Cd, Hg, Ag; mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC Figure 18: CMPs in December 2023



Cumulative Impact Sediment Chemistry for Total Organic Carbon (TOC) at ESC CMPs - December 2023

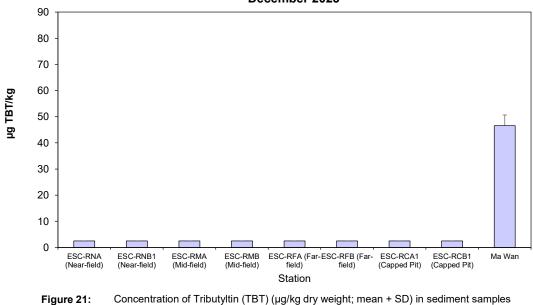
Concentration of Total Organic Carbon (TOC) (mg/kg dry weight; mean + SD) in Figure 19: sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in December 2023

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# Cumulative Impact Sediment Chemistry for Low and High Molecular Weight Polycyclic Aromatics Hydrocarbons (PAHs) at ESC CMPs - December 2023

Figure 20: Concentration of Low and High Molecular Weight Polycyclic Aromatics (mg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in December 2023



Cumulative Impact Sediment Chemistry for Tributyltin (TBTs) at ESC CMPs -December 2023

Figure 21: Concentration of Tributyltin (TBT) (μg/kg dry weight; mean + SD) in sediment samples collected from Cumulative Impact Sediment Chemistry Monitoring for ESC CMPs in December 2023