

# Mount Isa Waterways

Community information about Leichhardt  
River water quality based on findings from  
the *Lead Pathways Study Water Report*



MOUNT ISA  
MINES



## What is the Lead Pathways Study?

In 2006, Xstrata Mount Isa Mines commissioned The University of Queensland to conduct an independent *Lead Pathways Study*.

It is the most comprehensive study of its kind in Australia. The *Lead Pathways Study* investigates the natural and industrial pathways of lead and other heavy metals into the Mount Isa community and assesses any potential risks to human and ecological health.

## Land Report

The Land Report was released in 2009, concluding the risk to human health from historical mine sediment was low and recommending a number of actions to improve our environmental performance. These recommendations were fully adopted and implemented.

## Water Report

The *Lead Pathways Study* Water Report, peer reviewed by the CSIRO, was released in September 2012. The report concluded the risk to human health from heavy metals in the Leichhardt River Catchment, including Lake Moondarra, was low.

The study investigated the potential sources and pathways of heavy metals in the Leichhardt River (between Rifle Creek Dam and Lake Moondarra) over a number of sampling periods. The study then assessed the potential risks to human, pastoral and ecological health.

# What do the outcomes mean for me?

The Water Report represents a health check for water, sediment and aquatic species within the Leichhardt River and Lake Moondarra, with respect to the presence of heavy metals.

Importantly, what this study shows is that our community can continue to enjoy sport and recreational activities, such as swimming and boating, at Lake Moondarra in the same way they always have.

This publication contains an overview of the Water Report's human health risk assessment, including information about drinking water, raw river water, recreational use of the Leichhardt River and Lake Moondarra, fishing, and livestock watering.



## How is Xstrata addressing the Water Report's recommendations?

The health and wellbeing of our people and communities is paramount.

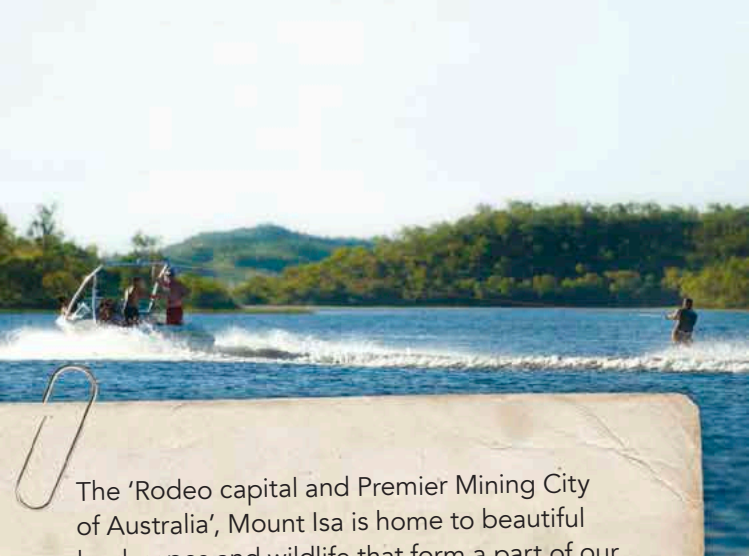
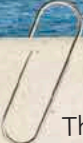
Studies like these are helping us continually improve our environmental performance and we are already making progress on all five recommendations of the Water Report.

Our mining operations have a track record of continuously improving environmental performance and consistently meeting evolving environmental requirements.

We have committed approximately \$360 million over the next five years to continue improving our environmental performance, with approximately \$60 million allocated specifically for water management initiatives.



For more information on our *Water Report Action Plan*, visit [www.mountisamines.com.au](http://www.mountisamines.com.au) in the *Lead Pathways Study Water Report* section.



The 'Rodeo capital and Premier Mining City of Australia', Mount Isa is home to beautiful landscapes and wildlife that form a part of our thriving outdoors community lifestyle.

Not the least of which is Lake Moondarra, rewarding locals and tourists with spectacular scenery, rich birdlife, a great place to partake in recreational activities and tranquil picnic areas where some of the best barbeques take place.

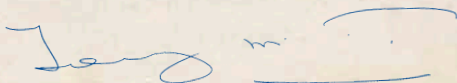
In 2006, Xstrata Mount Isa Mines commissioned the most comprehensive study of its kind in Australia to investigate the natural and industrial pathways of lead and other heavy metals into the Mount Isa community and assess the potential human and ecological health risks.

The *Lead Pathways Study Water Report* was released in September 2012 and provided some important insights into the health of our waterways and our continued safe enjoyment of them.

I have discussed the report and its findings with senior Xstrata officers and am pleased Xstrata has adopted all five recommendations into their action plan for improved environmental performance. The Council and Xstrata will continue to monitor the environment in line with our environmental regulatory regimes.

I honestly believe that Mount Isa is a great place to live, work and raise a family.

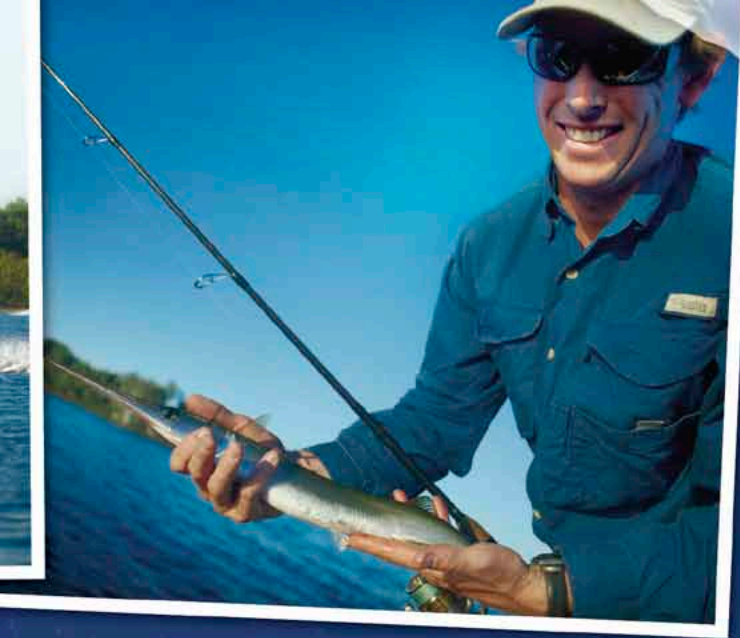
Sincerely,



Tony McGrady  
Mayor, Mount Isa







## Is my drinking water safe?

As expected, the Water Report confirmed that Mount Isa's drinking (potable) water supply, treated at Clear Water Lagoon, meets *Australian Drinking Water Guidelines* (ADWGs).

Clear Water Lagoon was constructed as a protected reservoir and acts as a biological filter for treating water from Lake Moondarra. It is considered an integral part of water treatment and filters on average 2,000 megalitres of water per month, supplying potable water to Mount Isa's community, mining and other industries.

## Raw river water

People should avoid drinking raw (untreated) river water from Leichhardt River and tributary creeks on the Xstrata mine lease.

The risk to public health from heavy metals in drinking raw river water every day is very low compared to the potential adverse impacts from biological contaminants such as bacteria, viruses and parasites.

# Can I swim in Lake Moondarra?

The *Lead Pathways Study* Water Report shows that our community can continue to enjoy sport and recreational activities at Lake Moondarra in the same way they always have.

Water samples assessed as part of the study met national guidelines for recreational water.

Recreational activities such as swimming and boating in the Leichhardt River, including Lake Moondarra, pose a low risk to human health.

## Are the fish safe?

Eating the flesh of fish caught in Lake Moondarra presents a low risk to human health from heavy metals.

However, people should avoid eating fish livers as they may have higher concentrations of heavy metals and other toxicants. This is an important consideration when eating fish in general, whether from Mount Isa or otherwise.

The study's results are in line with the *Australian Dietary Guidelines*, which recommend eating two to three serves of fish per week (serving size of 80–120g of cooked fish fillet for children and adults).

People should also avoid eating fish caught in pooled areas of the Leichhardt River between Mount Isa and Lake Moondarra during the dry season, as substances such as heavy metals and biological contaminants can be more concentrated. These substances are naturally diluted during the wet season.

## What about livestock watering?

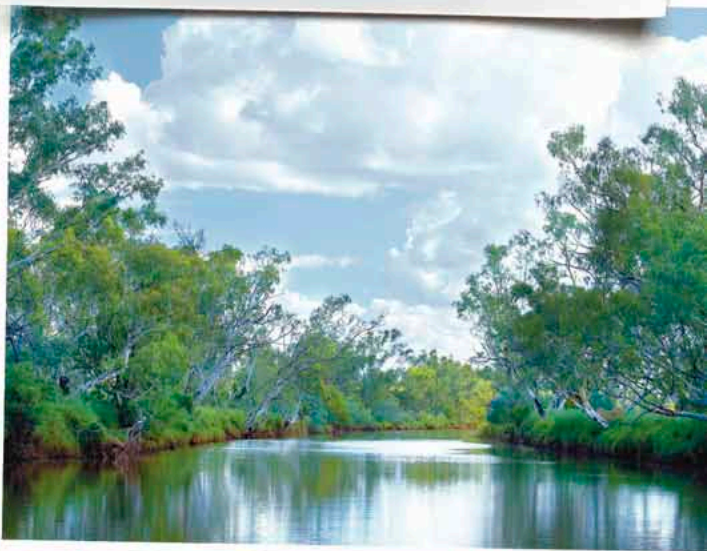
Leichhardt River water quality in the study area meets the national livestock watering guidelines for heavy metals.



## Results summary

The *Lead Pathways Study* Water Report shows that Leichhardt River water quality, including Lake Moondarra, poses a low risk to human health from heavy metals.

- Mount Isa's drinking water supply meets *Australian Drinking Water Guidelines* (ADWGs)
- Recreational activities, such as swimming and boating in the Leichhardt River and Lake Moondarra, pose a low risk to human health
- Eating the flesh of fish caught in Lake Moondarra presents a low risk to human health. People should avoid eating fish livers in general as they may have higher concentrations of heavy metals and other toxicants
- The Leichhardt River meets national livestock watering guidelines for heavy metals



# Supporting environmental initiatives in our backyard

Since 2005, we have contributed more than \$30 million to the north Queensland communities of Mount Isa, Cloncurry, Townsville and Bowen for a wide range of initiatives that support social and community development, education, health and environment amongst others.

In 2011, we donated \$235,000 to the Mount Isa Fish Stocking Group to create a fish hatchery in Mount Isa. Once established, the hatchery will be self-sustaining and capable of producing enough fingerlings to support fish stocks and provide a stable income stream for continued investment into local fish stocking programs.



## Where can I find out more?

**Call our Community Feedback Hotline**  
1800 982 982

**Email our team**  
[mountisamines@xstrata.com.au](mailto:mountisamines@xstrata.com.au)

**Write to us at**  
Xstrata Mount Isa Mines, Central Office  
Private Mail Bag 6, Mount Isa Qld 4825

[www.mountisamines.com.au](http://www.mountisamines.com.au)

