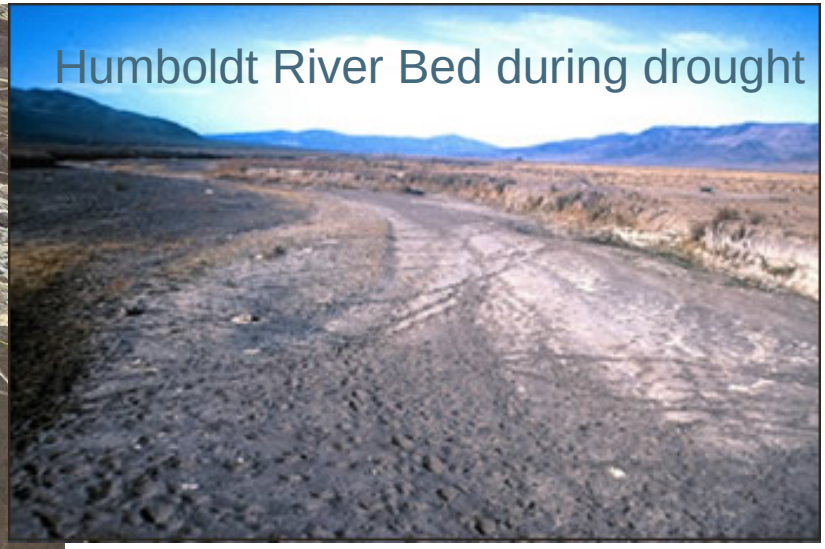
NEWMONT®

Mining Sector Collective Action on Water:
Challenges and Opportunities outside the fence line

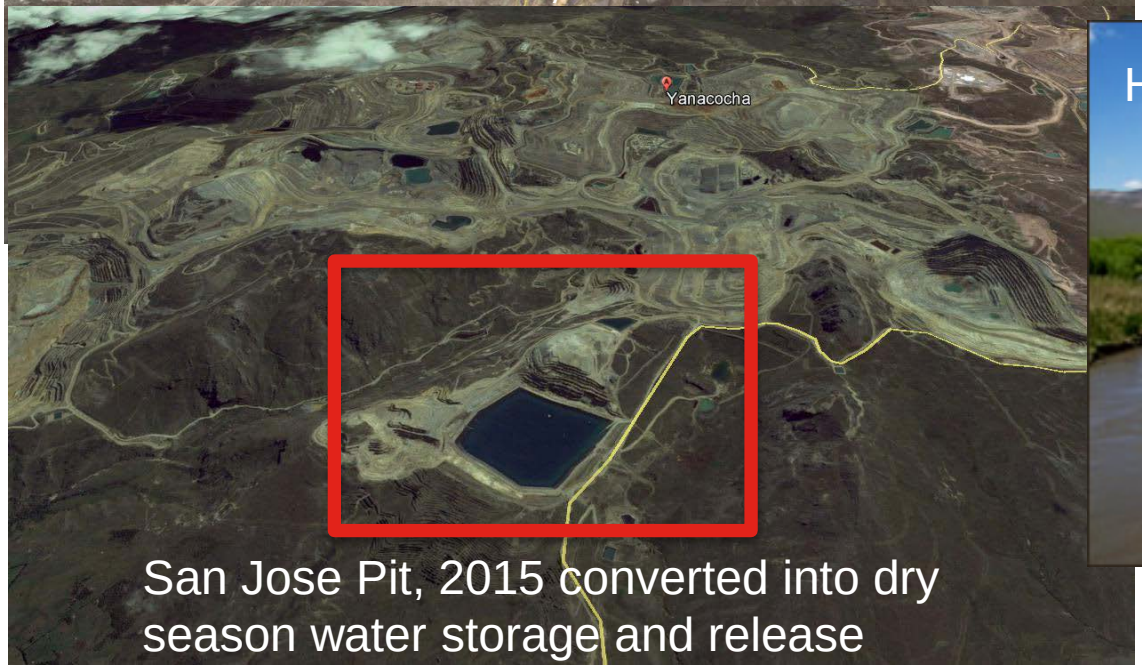
World Water Week – August 29, 2018

Mining and Watersheds

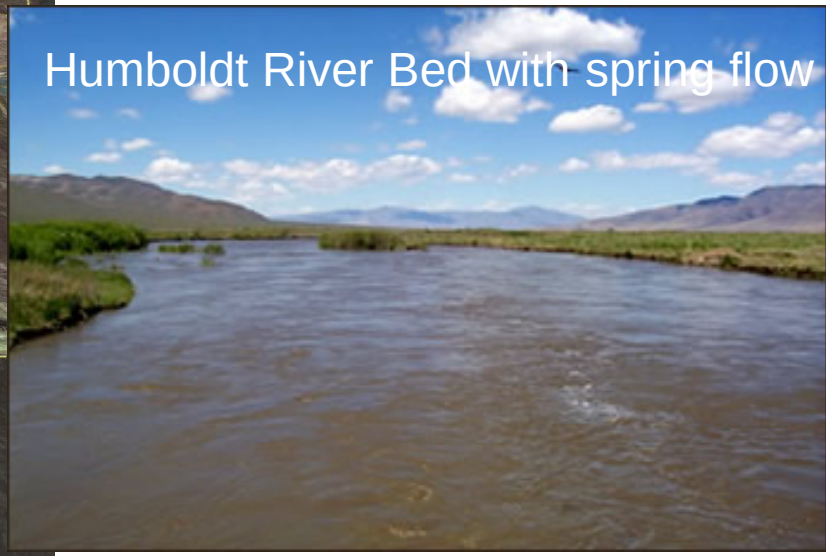
San Jose Pit, 2009



Humboldt River Bed during drought



San Jose Pit, 2015 converted into dry season water storage and release



Humboldt River Bed with spring flow

Challenges and Opportunities

Challenges	Opportunities
Mines have long lives with evolving potential impacts in dynamic watersheds often lacking appropriate national and local water governance.	Large data base of water information used to characterize watersheds, assess impacts, evaluate opportunities and improve governance.
Mine operations have historically focused on water management within the fence line (e.g. recycle/reuse, dewatering, stormwater management, treatment and discharge).	Ability to leverage water infrastructure to collaborate/support other watershed users and stakeholders in improvement projects.
Mines operate in remote locations where there may be limited availability/capacity of forums for collaborative management of the watershed.	Leverage existing economic and social development programs related to community water supply and sanitation to expand coverage and bring in other partners.

Global Water Strategy

Newmont developed and implemented a GWS in 2014 in recognition that performance and access to water is fundamental to the success of our business. The strategy is a framework to manage water as a precious resource and to work collaboratively to improve lives through water stewardship.

GWS Pillar	Objective	Accomplishment
Watershed Approach – Secure water supply for operations while enhancing other water uses	*Water Accounting and Reporting*	Developing a Water Accounting Framework (by site) to document use of water and volumes returned to the environment
Impact Mitigation– Mitigate environmental and social water related impacts	*Governance and Site Water Management*	Developing and implementing site and region-based water strategies and governance with clearly defined roles and responsibilities
Operational Performance – *Manage water as an asset through improved performance and compliance*	*Water Efficiency and Targets*	Reducing overall fresh water consumption by five percent in 2019, and setting context based targets starting in 2020
Impact Mitigation – *Collaborate and engage externally on water policy and challenges*	*Research and Innovation*	Methods to decrease treatment costs, increase efficiencies, reprocess materials and increased use of recycled and lower quality water for processing
Internal Collaboration – Collaborate and engage internally on water stewardship	*Collaboration and collective action*	Collaborating in watersheds on management and conservation. Investing in enhancing community water quality, access and availability, including establishing participatory water monitoring programs.

Water Stewardship Case Studies

Improving Water Quality and Supply in Cajamarca, Peru

- Joint initiative with municipal water authority.
- Support expanding and optimizing pipelines and sources and upgrading treatment
- Provided ~180K people with improved availability of ~ 30%

Reuse Treated Wastewater in Kalgoorlie-Boulder, Australia

- Agreement with Kalgoorlie-Boulder City Council
- Reuse cities treated waste water in process
- Reduce freshwater requirements
- Increase the amount of water available to reinject from pit dewatering activities (capturing 130 L/s)

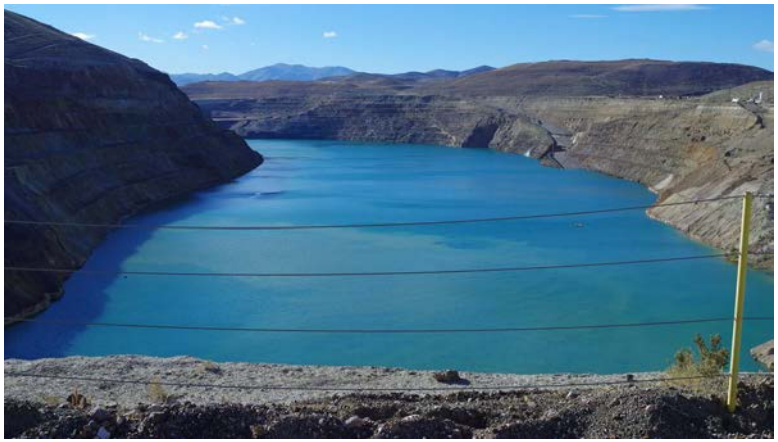
Water Stewardship Case Studies

Collective Action in Drought

NEVADA DROUGHT FORUM

- Support Governor's Drought Forum in Nevada – data and expertise
- Information used to support water management activities
  - Water Usage and Rights
  - Impacts and Mitigation

Collective Management supporting Regulatory Change



- Supported Nevada Division of Water Resources and Mining Association in the development of water rights process:
  - Post-mining pit lakes
  - Associated evaporative loss

Path Forward to Success

Due to population growth, increasing food/energy needs and climate change most watersheds are under increasing stress.

Maintaining social license to operate and sustaining business operations and growth in these changing conditions requires industry to be engaged and collaborating on the shared water challenges.

Water management	Watershed management	Water stewardship	Water innovation
Reducing, reusing & recycling water	Integration of local water risks and impacts	Collective action with stakeholders	Driving innovation
• *Governance & WAF* • *Fresh water use reduced by 3% (2017)* • *Target set to reduce fresh water use by 5% by 2019*	• *Collaboration with stakeholders* • *Investing in water quality, access and availability* • *Community monitoring programs*	• *Watershed characterization* • *Key risks/opportunities identified* • *Governance expanded* • *Setting watershed-based targets*	• *Identifying and forging outcomes-based partnerships to address major risks and opportunities*