RIZZO Associates (RIZZO) was a member company of the Wyaralong Dam Alliance, the team responsible for design and construction of a new Roller Compacted Concrete (RCC) water supply dam located on the Teviot Brook, near the Town of Beaudesert in the Logan River Catchment. The dam was designed to pass flood flows over a centrally placed overflow spillway under normal conditions, and was designed to withstand full flood and earthquake loading in accordance with the Queensland Dam Safety Management Guidelines and the Australian National Committee on Large Dams (ANCOLD) Guidelines. The dam construction consists of an approximately 1,640 ft. (500 m) long, 164 ft. (50 m) tall RCC Structure. It was completed in December 2010, and was delivered on budget and ahead of schedule. Challenges to the schedule and budget such as weather delays, delays of required approvals, and localized unexpected foundation conditions were encountered during the design phase and during the construction phase and were met with solutions to keep the project ahead of schedule and on budget.

During the Design Phase of the Project, RIZZO’s responsibilities included: stability analysis and optimization of the cross section of the dam; development of RCC design details including the drainage gallery and instrumentation; design of the foundation treatment and grout program; interpretation of geotechnical data; and development of associated drawings and specifications. RIZZO also performed thermal analysis, finite element analysis, and the preparation of specifications. In the construction phase of the Project, RIZZO provided engineering support to the Project for ongoing design details, and full time personnel on-site providing expertise to the foundation preparation, drilling and grouting, and RCC construction activities.

The Wyaralong Project highlights RIZZO experience with the following tasks:
- Structural and Dynamic Stability Analysis;
- Seismic Analysis;
- Stress Analysis;
- Comprehensive Geological and Geotechnical Investigations;
- Design Plans and Specifications;
- Instrumentation Design and Monitoring;
- Drafting Services;
- RCC Mix Design;
- Grout Program Design; and
- Construction oversight and support.

The Wyaralong Dam
BROMELTON, QLD, AUSTRALIA

PROFESSIONAL SERVICES
September 2009 – April 2011

CONSTRUCTION (IF APPLICABLE)
2011

PROJECT OWNER'S INFORMATION

<table>
<thead>
<tr>
<th>PROJECT OWNER</th>
<th>POINT OF CONTACT NAME</th>
<th>POINT OF CONTACT TELEPHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland Water Infrastructure Pty Ltd</td>
<td>Dave Murray</td>
<td>+61 7 3029 6788</td>
</tr>
</tbody>
</table>

YEAR COMPLETED