



ALGAE CONTROL

FLOATING DIFFUSED SUB-SURFACE AERATION FOR SEWAGE LAGOONS/PONDS

For Earth have developed a unique floating diffused aeration system for wastewater ponds.

The aeration system comprises of land based aeration blowers, poly supply lines and the diffusers are designed by For Earth and are highly efficient in dissolved oxygen supply in process water (SAE). The diffusers are micro-bubble with pore size 0.3-0.8mm.

The advantages of the floating diffused aeration system;

- Simple maintenance and servicing. Aeration Blowers are land based. Diffusers require cleaning annually and are easily removed and cleaned and replaced.
- Very low noise.
- Even distribution of dissolved oxygen
- No erosion of banks
- Easily relocated to other sites
- Considerable energy savings.

We recommend the application of our bacteria product **For Earth Bio** to ensure correct bacteria are present to reduce nutrients that promote algae growth.

If you have any questions Please don't hesitate to contact me directly.



Best regards

*Shane Mckibbin
Manager*

www.forearth.com.au

For Earth Pty Ltd (since 2004)
Bay 2, No1 Merrigal Rd
Port Macquarie NSW, Australia.
Tel: 61 02 65814353
E:shane@forearth.com.au

PROJECT FILE

Algae Control



Wastewater Solutions

| Client | Council |
|----------------------|---|
| Location | NSW |
| Sewage Treatment | Oxidation Ponds - since 1991 |
| Est daily flow (DWF) | 350,000L |
| Population | 1400 |
| Issues | Sludge Build up in ponds / algae blooms / water quality |
| Works installed | Installation of For Earth bacteria dosing and low energy diffused aeration system into lagoons 1 and 2. |
| Install Date | 20/01/2014 |
| Description | The two Google images below provide pre installation algae issue and post installation improvement in Lagoons 1 and 2 during peak Algae bloom season. |



For further details email: shanem@forearth.com.au

PROJECT FILE

Algae Control



Wastewater Solutions

| Client | Council |
|--------------------------|---|
| Location | NSW |
| Sewage Treatment Process | Digester, Trickle Filter and maturation pond |
| Est daily flow (DWF) | 325,000L |
| Population | 1300 |
| Issues | Maturation pond experiences algae blooms in summer |
| Works installed | Installation of For Earth low energy aeration system |
| Install Date | 10/05/2007 |
| Description | Carryover nutrient from treatment plant, stagnant water, high temps causing severe algae blooms. Sub-surface diffusers installed at inflow and discharge of pond. |



For further details email: shanem@forearth.com.au

www.forearth.com.au

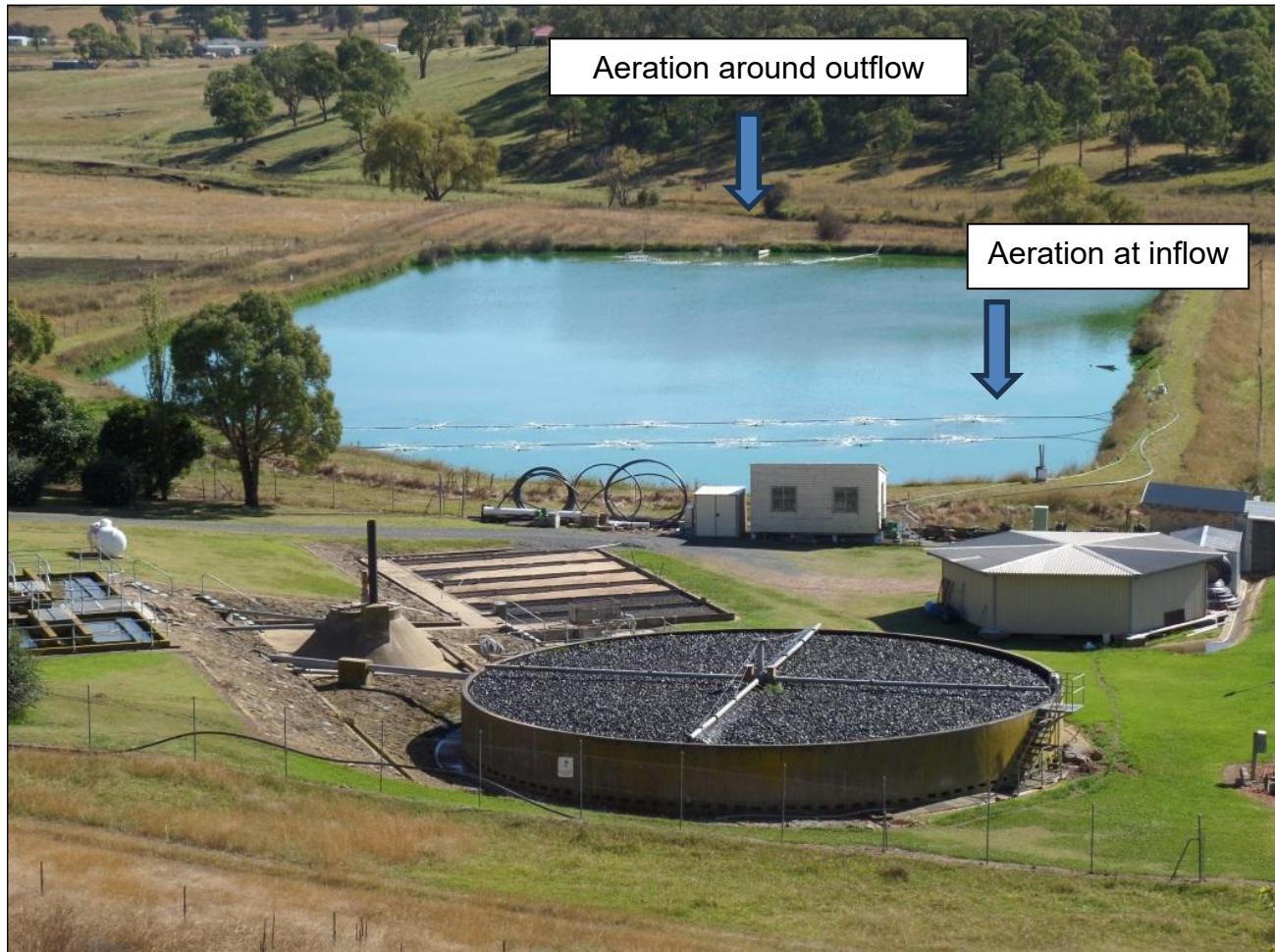
PROJECT FILE

Algae reduction in Tertiary ponds



Wastewater Solutions

| Client | Council |
|--------------------------|--|
| Location | NSW |
| Sewage Treatment Process | Primary settling tank , anaerobic digester, trickle filter and tertiary pond |
| Est daily flow (DWF) | 750,000L |
| Population | 3,021 |
| Issues | Algae in tertiary ponds during summer |
| Works installed | Installation of For Earth low energy aeration system and bacteria dosing system in Tertiary pond - inflow and outflow zones. |
| Reason | Reduce carryover nutrient levels from plant; prevent stagnation; desludge pond. |
| Description | 13/3/15: For Earth diffused aeration and automated bacteria system installed into Tertiary pond. |



For further details email: shanem@forearth.com.au

PROJECT FILE

Floating Diffused Aeration



Wastewater Solutions

| Client | Council |
|--------------------------|--|
| Location | NSW |
| Sewage Treatment Process | SBR, tertiary ponds |
| Est daily flow (DWF) | 3,000,000L |
| Population | 17,000 |
| Issues | Algae in summer blocking irrigation |
| Works installed | Installation of For Earth low energy aeration system and bacteria dosing system |
| Install Date | Dec 2017 |
| Description | Aeration Initially installed into inflow cells of tertiary lagoon and then installed into outflow cell the following summer. |



For further details email: shanem@forearth.com.au

www.forearth.com.au

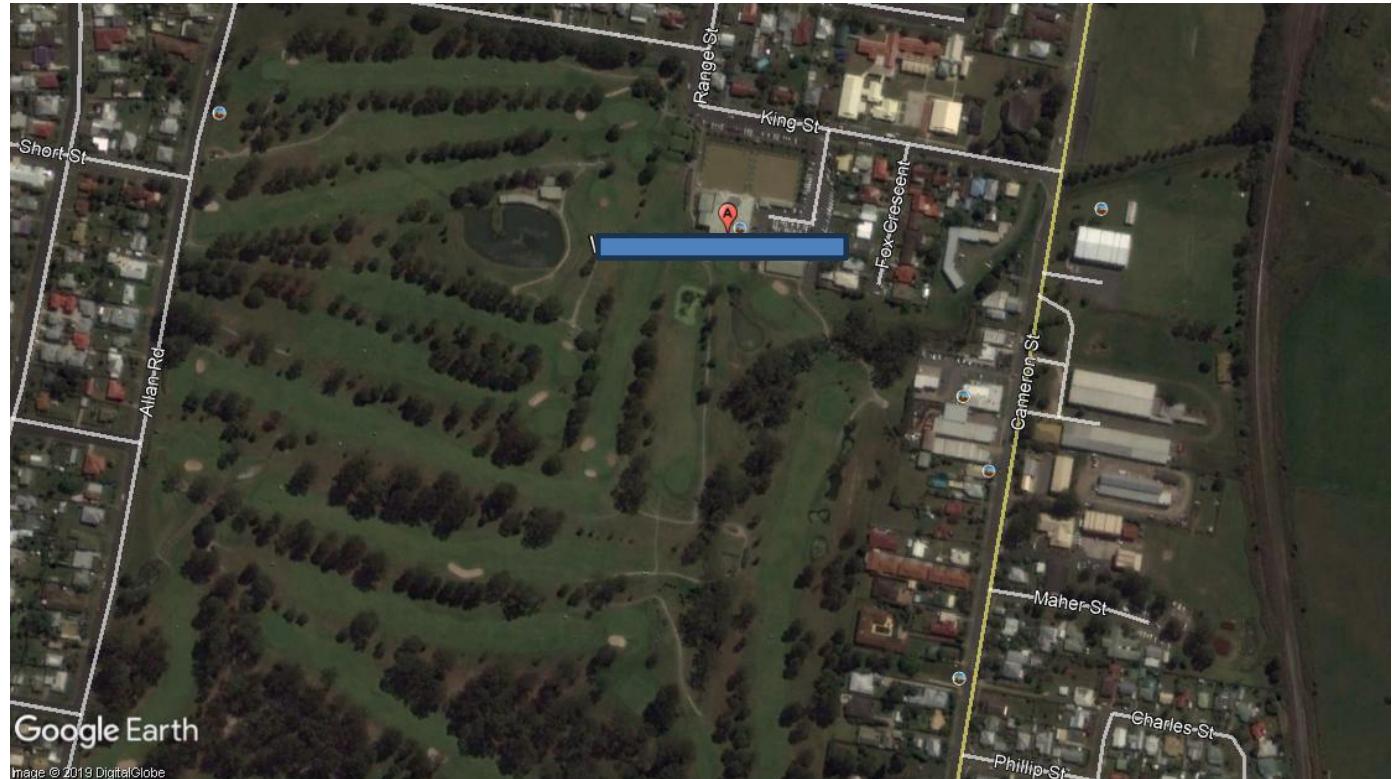
PROJECT FILE

Algae Control



Wastewater Solutions

| | |
|-------------------|--|
| Client | Golf Course |
| Location | NSW |
| Treatment Process | Irrigation water holding dam. |
| Est daily flow | Rainfall and top up from tertiary treated wastewater. |
| Issues | Algae blooms in summer blocking irrigation systems |
| Treatment | 2008: Client had existing aeration system so simply applied For Earth Bio manually. |
| Description | Golf greenkeeper experiencing frustrating irrigation blockage issues in summer due to algae blooms. Commenced a bacteria application programme and no longer has these issues. |



For further details email: shanem@forearth.com.au

www.forearth.com.au

PROJECT FILE

Algae Control



Wastewater Solutions

| Client | Council |
|--------------------------|---|
| Location | NSW |
| Sewage Treatment Process | IDEA treatment process and tertiary ponds |
| Est daily flow (DWF) | 800,000L |
| Population | 400 |
| Issues | Algae blooms in Summer |
| Works installed | For Earth floating diffused aeration system |
| Install Date | June 2013 |
| | |



For further details email: shanem@forearth.com.au

www.forearth.com.au

PROJECT FILE

Floating Diffused Aeration – Algae treatment



Wastewater Solutions

| Client | Council |
|--------------------------|--|
| Location | NSW. |
| Sewage Treatment Process | Oxidation ponds , tertiary pond, winter storage. |
| Est daily flow (DWF) | 300,000L |
| Population | 900 |
| Issues | Algae |
| Works installed | Installation of For Earth diffused aeration system |



Before

After

