14. The method of claim 2, wherein the at least one different water treatment chemical controls a fouling material in the aqueous system that comprises scale.

15. The method of claim 2, wherein the at least one different water treatment chemical controls scale in the aqueous system.

16. The method of claim 1, further comprising:

(i) providing at least one sampling location where fluid extracted from the aqueous system is subjected to spectrofluorometric analysis with a fluorometer to measure the fluorescence signal; and

(ii) providing a controller operable to automatically control introduction of additional water treatment composition into the aqueous system from a material supply based on the measured value of the fluorescence signal of the extracted sample.

~~17. A method of controlling the growth of at least one fouling material in an aqueous system, comprising:~~

~~providing a water treatment composition in an aqueous system, wherein the composition comprises a nonpolymerized quinine and at least one water treatment chemical in a selected proportion;~~

~~determining a concentration of said at least one water treatment compound in said aqueous system using a measured fluorescence signal of the nonpolymerized quinine; and~~

~~maintaining a concentration of said water treatment compound in said aqueous system within a selected concentration range based on a result of said measured fluorescence signal of the nonpolymerized quinine;~~

~~wherein the water treatment composition interacts with the aqueous system to control the growth of at least one fouling material in the aqueous system.~~

14. The method of claim 2, wherein the at least one different water treatment chemical controls a fouling material in the aqueous system that comprises scale.

15. The method of claim 2, wherein the at least one different water treatment chemical controls scale in the aqueous system.

16. The method of claim 1, further comprising:

(i) providing at least one sampling location where fluid extracted from the aqueous system is subjected to spectrofluorometric analysis with a fluorometer to measure the fluorescence signal; and

(ii) providing a controller operable to automatically control introduction of additional water treatment composition into the aqueous system from a material supply based on the measured value of the fluorescence signal of the extracted sample.