CLAIMS:

1. A ride system, comprising:

a motion governor comprising:

a flume providing

a conveyor configured to rotate along a track disposed within a flow path of a water ride and configured to accommodate a buoyant ride vehicle;

at least one support element extending into the flow path and at least partially submerged within the flow path;

a driving mechanism configured to actuate the at least one support element such that the at least one support element moves relative to the flow pathcontrol rotation of the conveyor in response to a control signal; and

at least one support element coupled to the conveyor, wherein the at least one support element is configured to contact the buoyanta ride vehicle to control movement of the buoyant ride vehicle along the flow path while the at least one support element is being actuated; andride vehicle

a controller configured to generate the control signal based at least in part on a location of the buoyant ride vehicle in the flow path and a timer controlling activation of a show element, wherein the show element is located along the flow path.

2. The ride system of claim 1, wherein the driving mechanism is configured to adjust a rate of actuation of the at least one support element based on the control signal.

3. The ride system of claim 1, wherein the driving mechanism is configured to rotate a conveyor, the conveyor disposed within the flow path, and wherein the at least one support element is coupled to the conveyor and configured to move in conjunction with rotation of the conveyor.

4. The ride system of claim 1, wherein the driving mechanism is configured to drive the at least one support element along a slide track in response to the control signal.

5. The ride system of claim 1, wherein the at least one support element is configured tonot in contact a rear side ofwith the buoyant ride vehicle to accelerate movement or maintain movement ofwhen the buoyant ride vehicle.control signal is not active; and

6. The ride system of claim 1, wherein the at least one support element is configured to contact a front side of the buoyant ride vehicle to decelerate movement of the buoyant ride vehicle.

7. The ride system of claim 1, wherein the at least one support element is configured to contact a lateral side of the buoyant ride vehicle to cause lateral movement of the buoyant ride vehicle.

8. The ride system of claim 1, wherein the flow path separates into a first flow path and a second flow path at a divergence point, and wherein the at least one support element is configured to move the buoyant ride vehicle toward the first flow path or the second flow path at the divergence point based at least in part on the control signal.

9. The ride system of claim 1, further comprising a sensor configured to detect a location of the buoyant ride vehicle in the flow path and output a location signal indicative of a distance between the buoyant ride vehicle and the show element.

10. The ride system of claim 9, wherein the controller is configured to determine a speed of the buoyant ride vehicle and an estimated arrival time of the buoyant ride vehicle to the show element based at least in part on the location signal.

11. A ride system, comprising: a motion governor comprising:

a conveyor configured to rotate along a track disposed within a flow path of a water ride;

~~a driving mechanism configured to control rotation of the conveyor in response to a control signal; and~~

~~at least one support element coupled to the conveyor, wherein the at least one support element is configured to contact a ride vehicle to control movement of the ride vehicle along the flow path; and~~

a controller configured to receive a location signal indicative of a location of the ride vehicle along the flow path; estimate an arrival time to a show element based on the location; determine that the estimated arrival time deviates from a scheduled show element start time; and generate the control signal upon determining that the estimated arrival time deviates from the scheduled show element start time.

~~12.~~ 2. The ride system of ~~11~~1, wherein the at least one support element comprises a paddle configured to reversibly contact a front, rear, or lateral side of the ride vehicle or a combination thereof.

~~13.~~ 3. The ride system of ~~12~~2, wherein the paddle comprises a plurality of through passages such that fluid from the flow path passes through at least one interior portion of the paddle.

~~14.~~ 4. The ride system of ~~11~~1, wherein the at least one support element is configured to be retracted or positioned out of the flow path in a default position and wherein the control signal causes deployment of the at least one support element into the flow path in an activated position.

~~15.~~ 5. The ride system of ~~11~~1, wherein the at least one support element comprises a first support element and a second support element, wherein the first support element is positioned proximate a front side of the ride vehicle and the second support element is positioned proximate a rear side of the ride vehicle, and wherein the ride vehicle is configured to decelerate in response to contact with the first support element,

accelerate in response to contact with the second support element, and free float when disposed between the first support element and the second support element.

~~16.~~ 6. The ride system of~~-~~ claim ~~11~~1, wherein the controller generates the control signal to control rotation of the conveyor based on the location of the ride vehicle and a conveyor location such that rotation of the conveyor moves the at least one support element towards the ride vehicle.

~~17.~~ 7. The ride system of~~-~~ claim ~~16~~6, wherein the control signal causes the conveyor to move the at least one support element along an axis of travel of the ride vehicle in the flow path.

~~18.~~ 8. The ride system of~~-~~ claim ~~11~~1, wherein the at least one support element is not fixed to the ride vehicle.

~~19. A method, comprising:~~

~~providing a flow path configured to be traversed by a buoyant ride vehicle; receiving a control signal comprising instructions to actuate a driving mechanism based at least in part on a location of the buoyant ride vehicle in the flow path and a timer of a show element;~~

~~actuating the driving mechanism in response to the control signal, wherein at least one support element is coupled to the driving mechanism and configured to move along the flow path as a result of actuating the driving mechanism; and~~

~~contacting the buoyant ride vehicle with the at least one support element to change a speed of the ride vehicle along the flow path.~~

~~20. The method of claim 19, moving the at least one support element into the flow path from a default position out of the flow path based on the location of the buoyant ride vehicle such that the at least one support element moves into the flow path to be positioned at or near a rear or a lateral side of the buoyant ride vehicle to push the buoyant ride vehicle within the flow path.~~

~~21 The method of claim 19, comprising adjusting a rate of rotation of a conveyor of the driving mechanism based on the control signal.~~

9. A ride system, comprising:

~~22.~~ a controller configured to:

determine a location of a buoyant ride vehicle in a flow path and with respect to a show element;

determine an estimated arrival time of the buoyant ride vehicle at the show element based at least in part on the location;

determine that the estimated arrival time deviates from a scheduled show element start time;

generate a control signal comprising instructions to rotate a conveyor upon determining that the estimated arrival time deviates from the scheduled show element start time; wherein at least one support element is coupled to the conveyor and ~~is configured to contact the buoyant ride vehicle to control movement of the buoyant ride vehicle along the flow path based on rotation of the conveyor~~wherein the at least one support element comprises a first support element and a second support element, wherein the first support element is positioned proximate a front side of the buoyant ride vehicle and the second support element is positioned proximate a rear side of the buoyant ride vehicle, and wherein the buoyant ride vehicle is configured to decelerate in response to contact with the first support element, accelerate in response to contact with the second support element, and free float when disposed between the first support element and the second support element; and

output the control signal to a motion governor coupled to the conveyor.

~~23.~~ 10. The ride system of ~~claim 22~~9, wherein the controller is configured to generate the control signal to actuate a driving mechanism at a rate configured to slow down the buoyant ride vehicle based at least in part on a determination that the buoyant ride vehicle will arrive to the show element before a scheduled show element start time.

~~24.~~ 11. The ride system of ~~claim 22~~9, wherein the controller is configured to generate the control signal to actuate a driving mechanism at a rate configured to increase a speed of the buoyant ride vehicle in the flow path based at least in part on a determination that the buoyant ride vehicle will arrive to the show element after a schedule show element start time.

12. The ride system of claim ~~22~~9, wherein the control system is configured to output a disengage control signal in response to determining that the buoyant ride vehicle will arrive at the show element on time, wherein the at least one support element is configured retract from the flow path to avoid contact with the buoyant ride vehicle in response to the disengage control signal.

13. A ride system, comprising:

a motion governor comprising:

a conveyor configured to rotate along a track disposed within a flow path of a water ride;

a driving mechanism configured to control rotation of the conveyor in response to a control signal; and

at least one support element coupled to the conveyor, wherein the at least one support element is configured to be retracted or positioned out of the flow path in a default position, wherein the control signal causes deployment of the at least one support element into the flow path in an activated position, and wherein the at least one support element is configured to contact a ride vehicle in the activated position; and

a controller configured to receive a location signal indicative of a location of the ride vehicle along the flow path; estimate an arrival time to a show element based on the location; determine that the estimated arrival time deviates from a scheduled show element start time; and generate the control signal upon determining that the estimated arrival time deviates from the scheduled show element start time.