CLAIMS

What is claimed is:

1. A wellbore system, comprising:

an upper deflector arranged within a main bore of a wellbore and defining first and second channels that extend longitudinally through the upper deflector;

a lower deflector arranged within the main bore and spaced from the upper deflector by a predetermined distance, the lower deflector defining a first conduit that communicates with a lower portion of the main bore and a second conduit that communicates with a lateral bore; and

a bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip,

wherein the upper and lower deflectors are configured to direct the bullnose assembly into either the lateral bore or the lower portion of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

2. The wellbore system of claim 1, wherein the upper deflector provides a ramped surface facing toward an uphole direction within the main bore, the ramped surface being configured to direct the bullnose assembly into the second channel.

3. The wellbore system of claim 1, wherein, when the length of the bullnose tip is greater than the predetermined distance, the bullnose assembly is directed into the second conduit and the lateral bore.

4. The wellbore system of claim 1, wherein, when the length of the bullnose tip is less than the predetermined distance, the bullnose assembly is directed into the first conduit and the lower portion of the main bore.

5. The wellbore system of claim 1, wherein the bullnose tip or the sleeve member is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length.

6. The wellbore system of claim 5, wherein the first length is less than the predetermined distance, and the second length is greater than both the first length and the predetermined distance.

7. The wellbore system of claim 5, wherein the first length is greater than both the second length and the predetermined distance, and the second length is less than the predetermined distance.

8. The wellbore system of claim 1, wherein the bullnose tip or the sleeve member is actuatable using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.

9. A method, comprising:

introducing a bullnose assembly into a main bore of a wellbore, the bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein at least one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip;

directing the bullnose assembly through an upper deflector arranged within the main bore, the upper deflector defining first and second channels that extend longitudinally therethrough;

advancing the bullnose assembly to a lower deflector arranged within the main bore and spaced from the upper deflector by a predetermined distance, the lower deflector defining a first conduit that communicates with a lower portion of the main bore and a second conduit that communicates with a lateral bore; and

directing the bullnose assembly into either the lateral bore or the lower portion of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

10. The method of claim 9, wherein directing the bullnose assembly through the upper deflector comprises:

engaging the bullnose tip on a ramped surface defined by the upper deflector; and

directing the bullnose tip into and through the second channel with the ramped surface.

11. The method of claim 9, further comprising actuating the bullnose assembly between a default configuration, where the length of the bullnose tip exhibits a first length that is less than the predetermined distance, and an actuated configuration, where the length of the bullnose tip exhibits a second length that is greater than both the first length and the predetermined distance.

12. The method of claim 11, further comprising:

directing the bullnose assembly into the first conduit and the lower portion of the main bore when the length of the bullnose tip is the first length; and

directing the bullnose assembly into the second conduit and the lateral bore when the length of the bullnose tip is the second length.

13. The method of claim 9, further comprising actuating the bullnose assembly between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length, wherein the second length is less than the predetermined distance and the first length is greater than both the second length and the predetermined distance.

14. The method of claim 13, further comprising:

directing the bullnose assembly into the second conduit and the lateral bore when the length of the bullnose tip is the first length; and

directing the bullnose assembly into the first conduit and the lower portion of the main bore when the length of the bullnose tip is the second length.

15. The method of claim 9, further comprising actuating the bullnose assembly by using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.

16. A multilateral wellbore system, comprising:

a main bore having a first junction and a second junction spaced downhole from the first junction;

a first deflector assembly arranged at the first junction and comprising a first upper deflector and a first lower deflector spaced from the first upper deflector by a predetermined distance, the first lower deflector defining a first conduit that communicates with a first lower portion of the main bore and a second conduit that communicates with a first lateral bore;

a second deflector assembly arranged at the second junction and comprising a second upper deflector and a second lower deflector spaced from the second upper deflector by the predetermined distance, the second lower deflector defining a third conduit that communicates with a second lower portion of the main bore and a fourth conduit that communicates with a second lateral bore; and

a bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip,

wherein the first and second deflector assemblies are configured to direct the bullnose assembly into either the first and second lateral bores or the first and second lower portions of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

17. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length that is less than the predetermined distance, and an actuated configuration, where the length of the bullnose tip exhibits a second length that is greater than both the first length and the predetermined distance.

18. The multilateral wellbore system of claim 17, wherein,

when the length of the bullnose tip is the first length, the bullnose assembly is directed into the first conduit and the first lower portion of the main bore or the third conduit and the second lower portion of the main bore, and wherein

when the length of the bullnose tip is the second length, the bullnose assembly is directed into the second conduit and the first lateral bore or the fourth conduit and the second lateral bore.

19. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length, wherein the second length is less than the predetermined distance, and the first length is greater than both the second length and the predetermined distance.

20. The multilateral wellbore system of claim 19, wherein,

when the length of the bullnose tip is the first length, the bullnose assembly is directed into the second conduit and the first lateral bore or the fourth conduit and the second lateral bore; and wherein,

when the length of the bullnose tip is the second length, the bullnose assembly is directed into the first conduit and the first lower portion of the main bore or the third conduit and the second lower portion of the main bore.

21. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.

CLAIMS

What is claimed is:

1. A wellbore system, comprising :

an upper deflector arranged within a main bore of a wellbore and defining first and second channels that extend longitudinally through the upper deflector;

the first channel exhibiting a first width and the second channel exhibiting a second width wherein the second width is equivalent to a diameter of the second channel;

a lower deflector arranged within the main bore and spaced from the upper deflector by a predetermined distance, the lower deflector defining a first conduit that communicates with a lower portion of the main bore and a second conduit that communicates with a lateral bore; and

a bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip,

wherein the upper and lower deflectors are configured to direct the bullnose assembly into either the lateral bore or the lower portion of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

2. The wellbore system of claim 1, wherein the upper deflector provides a ramped surface facing toward an uphole direction within the main bore, the ramped surface being configured to direct the bullnose assembly into the second channel.

3. The wellbore system of claim 1, wherein, when the length of the bullnose tip is greater than the predetermined distance, the bullnose assembly is directed into the second conduit and the lateral bore.

4. The wellbore system of claim 1, wherein, when the length of the bullnose tip is less than the predetermined distance, the bullnose assembly is directed into the first conduit and the lower portion of the main bore.

5. The wellbore system of claim 1, wherein the bullnose tip or the sleeve member is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length.

6. The wellbore system of claim 5, wherein the first length is less than the predetermined distance, and the second length is greater than both the first length and the predetermined distance.

7. The wellbore system of claim 5, wherein the first length is greater than both the second length and the predetermined distance, and the second length is less than the predetermined distance.

8. The wellbore system of claim 1, wherein the bullnose tip or the sleeve member is actuatable using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.

9. A method, comprising:

introducing a bullnose assembly into a main bore of a wellbore, the bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein at least one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip;

directing the bullnose assembly through an upper deflector arranged within the main bore, the upper deflector defining first and second channels that extend longitudinally therethrough;

the first channel exhibiting a first width and the second channel exhibiting a second width wherein the second width is equivalent to a diameter of the second channel;

advancing the bullnose assembly to a lower deflector arranged within the main bore and spaced from the upper deflector by a predetermined distance, the lower deflector defining a first conduit that communicates with a lower portion of the main bore and a second conduit that communicates with a lateral bore; and

directing the bullnose assembly into either the lateral bore or the lower portion of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

10. The method of claim 9, wherein directing the bullnose assembly through the upper deflector comprises:

engaging the bullnose tip on a ramped surface defined by the upper deflector; and

directing the bullnose tip into and through the second channel with the ramped surface.

11. The method of claim 9, further comprising actuating the bullnose assembly between a default configuration, where the length of the bullnose tip exhibits a first length that is less than the predetermined distance, and an actuated configuration, where the length of the bullnose tip exhibits a second length that is greater than both the first length and the predetermined distance.

12. The method of claim 11, further comprising :

directing the bullnose assembly into the first conduit and the lower portion of the main bore when the length of the bullnose tip is the first length; and

directing the bullnose assembly into the second conduit and the lateral bore when the length of the bullnose tip is the second length.

13. The method of claim 9, further comprising actuating the bullnose assembly between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length, wherein the second length is less than the predetermined distance and the first length is greater than both the second length and the predetermined distance.

14. The method of claim 13, further comprising :

directing the bullnose assembly into the second conduit and the lateral bore when the length of the bullnose tip is the first length; and

directing the bullnose assembly into the first conduit and the lower portion of the main bore when the length of the bullnose tip is the second length.

15. The method of claim 9, further comprising actuating the bullnose assembly by using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.

16. A multilateral wellbore system, comprising:

a main bore having a first junction and a second junction spaced downhole from the first junction;

a first deflector assembly arranged at the first junction and comprising a first upper deflector and a first lower deflector spaced from the first upper deflector by a predetermined distance, the first upper deflector defining first and second channels that extend longitudinally through the first upper deflector, the first channel exhibiting a first width and the second channel exhibiting a second width wherein the second width is equivalent to a diameter of the second channel;

the first lower deflector defining a first conduit that communicates with a first lower portion of the main bore and a second conduit that communicates with a first lateral bore;

a second deflector assembly arranged at the second junction and comprising a second upper deflector and a second lower deflector spaced from the second upper deflector by the predetermined distance, the second upper deflector defining first and second channels that extend longitudinally through the second upper deflector, the first channel exhibiting a first width and the second channel exhibiting a second width wherein the second width is equivalent to a diameter of the second channel;

the second lower deflector defining a third conduit that communicates with a second lower portion of the main bore and a fourth conduit that communicates with a second lateral bore; and

a bullnose assembly including a body, a bullnose tip arranged at a distal end of the body, and a sleeve member arranged about the body, wherein one of the bullnose tip and the sleeve member is axially movable in order to vary a length of the bullnose tip,

wherein the first and second deflector assemblies are configured to direct the bullnose assembly into either the first and second lateral bores or the first and second lower portions of the main bore based on the length of the bullnose tip as compared to the predetermined distance.

17. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length that is less than the predetermined distance, and an actuated configuration, where the length of the bullnose tip exhibits a second length that is greater than both the first length and the predetermined distance.

18. The multilateral wellbore system of claim 17, wherein,

when the length of the bullnose tip is the first length, the bullnose assembly is directed into the first conduit and the first lower portion of the main bore or the third conduit and the second lower portion of the main bore, and wherein

when the length of the bullnose tip is the second length, the bullnose assembly is directed into the second conduit and the first lateral bore or the fourth conduit and the second lateral bore.

19. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable between a default configuration, where the length of the bullnose tip exhibits a first length, and an actuated configuration, where the length of the bullnose tip exhibits a second length, wherein the second length is less than the predetermined distance, and the first length is greater than both the second length and the predetermined distance.

20. The multilateral wellbore system of claim 19, wherein,

when the length of the bullnose tip is the first length, the bullnose assembly is directed into the second conduit and the first lateral bore or the fourth conduit and the second lateral bore; and wherein,

when the length of the bullnose tip is the second length, the bullnose assembly is directed into the first conduit and the first lower portion of the main bore or the third conduit and the second lower portion of the main bore.

21. The multilateral wellbore system of claim 16, wherein the bullnose assembly is actuatable using at least one of hydraulic pressure acting on a piston operatively coupled to one of the bullnose tip or the sleeve member, an actuating device operatively coupled to one of the bullnose tip or the sleeve member, and a pressure drop created across the bullnose assembly which forces a piston that is operatively coupled to one of the bullnose tip or the sleeve member to move.