WHAT IS CLAIMED IS:

1. A seal assembly, comprising:

a pipe;

an outer tubular positioned around the pipe, the outer tubular and pipe forming an enclosed seal gland;

an I-shaped metal seal located within the enclosed seal gland, the I-shaped metal seal having pairs of arms separated by a central feature, the pairs of arms and central feature forming first and second recesses, the first and second recesses radially separated by the central feature, the I-shaped seal forming a footprint; and

expanded metal positioned within the first and second recesses, the expanded metal comprising a metal that has expanded in response to hydrolysis to assist in sealing the enclosed seal gland, the expanded metal axially activating the pairs of arms against ones of the outer tubular or the pipe to seal the enclosed seal gland, without extending radially outside of the footprint of the I-shaped seal and without extending axially outside of the footprint of the I-shaped seal.

2. The seal assembly as recited in Claim 1, wherein the expanded metal is an expanded metal seal operable to seal the enclosed seal gland, or optionally wherein the expanded metal seal is a first seal, and further including a second elastomeric seal positioned within the enclosed seal gland, or optionally wherein the expanded metal seal is in an expanded state axially activating the second elastomeric seal to further seal the enclosed seal gland.

3. The seal assembly as recited in Claim 1, wherein the metal seal is a first seal, and further including a second elastomeric seal positioned within the enclosed seal gland, or optionally wherein the expanded metal is in an expanded state axially activating the second elastomeric seal to further seal the enclosed seal gland.

4. The seal assembly as recited in Claim 1, wherein the expanded metal includes residual unreacted metal.

5. A method for sealing, comprising:

providing a downhole tool, the downhole tool having a sealing assembly, including:

a pipe;

an outer tubular positioned around the pipe, the outer tubular and pipe forming an enclosed seal gland;

an I-shaped metal seal located within the enclosed seal gland, the I-shaped metal seal having pairs of arms separated by a central feature, the pairs of arms and central feature forming first and second recesses, the first and second recesses radially separated by the central feature, the I-shaped seal forming a footprint; and

pre-expansion expandable metal positioned within the first and second recesses, the pre-expansion expandable metal comprising a metal configured to expand in response to hydrolysis, the pre-expansion expandable metal configured to axially activate the pairs of arms against ones of the outer tubular or the pipe to seal the enclosed seal gland; and

subjecting the pre-expansion expandable metal to reactive fluid to form an expanded metal in the enclosed seal gland and thereby assist in sealing the enclosed seal gland, wherein the expanded metal does not extend radially outside of the footprint of the I-shaped seal and does not extend axially outside of the footprint of the I-shaped seal.

6. The method as recited in Claim 5, wherein subjecting the pre-expansion expandable metal to reactive fluid occurs outside of a wellbore, and further including positioned the downhole tool having the expanded metal within the wellbore.

7. The method as recited in Claim 5, wherein providing the downhole tool includes providing the downhole tool within a wellbore, and subjecting the pre-expansion expandable metal to the reactive fluid occurs inside the wellbore.

8. The method as recited in Claim 5, wherein the expanded metal is a first expanded metal seal, and further including a second elastomeric seal positioned within the enclosed seal gland, and further wherein the subjecting the pre-expansion expandable metal to the reactive fluid to form the expanded metal axially activates the second elastomeric seal to further seal the enclosed seal gland.

9. The method as recited in Claim 5, wherein the I-shaped metal seal is a first metal seal, and further including a second elastomeric seal positioned within the enclosed seal gland, and further wherein the subjecting the pre-expansion expandable metal to the reactive fluid to form the expanded metal axially activates the second elastomeric seal to further seal the enclosed seal gland.

10. A well system, comprising:

a wellbore extending through one or more subterranean formations; and

a downhole tool located within the wellbore, the downhole tool having a seal assembly, the seal assembly including:

a pipe;

an outer tubular positioned around the pipe, the outer tubular and pipe forming an enclosed seal gland; an I-shaped metal seal located within the enclosed seal gland, the I-shaped metal seal having pairs of arms separated by a central feature, the pairs of arms and central feature forming first and second recesses, the first and second recesses radially separated by the central feature, the I-shaped seal forming a footprint; and

expanded metal positioned within the first and second recesses, the expanded metal comprising a metal that has expanded in response to hydrolysis to assist in sealing the enclosed seal gland, the expanded metal axially activating the pairs of arms against ones of the outer tubular or the pipe to seal the enclosed seal gland, without extending radially outside of the footprint of the I-shaped seal and without extending axially outside of the footprint of the I-shaped seal.